



WLR-4002B



wireless gigabit
VPN router N300

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SITECOM**CE COMPLIANCE**

Hereby Sitecom Europe BV declares that this product is in accordance with essential requirements and other relevant terms of the European regulation 1999/5/EC.

**CONFORMITE CE**

Par la présente Sitecom Europe BV, déclare que l'appareil est conforme aux exigences essentielles et aux dispositions pertinentes de la Directive Européenne 1999/5/EC.

**CE-CONFORMITÄT**

Hiermit erklärt Sitecom Europe BV, dass dieses Produkt die erforderlichen Voraussetzungen und andere relevante Konditionen der europäischen Richtlinie 1999/5/EC erfüllt.

**CONFORMITA ALLE NORME CE**

Con la presente Sitecom Europe BV dichiara che questo prodotto è conforme ai requisiti essenziali e agli altri termini rilevanti della Direttiva Europea 1999/5/EC.

**CE GOEDKEURING**

Hierbij verklaart Sitecom Europe BV dat dit product in overeenstemming is met de essentiële eisen en andere relevante bepalingen van Europese Richtlijn 1999/5/EC.

**CONFORMIDAD CON LA CE**

Por la presente Sitecom Europe BV declara que este producto cumple con los requisitos esenciales y las otras provisiones relevantes de la Directiva Europea 1999/5/EC.

**CONFORMIDADE CE**

Pela presente a Sitecom Europe BV declara que este produto está em conformidade com os requisitos essenciais e outras condições relevantes da regulamentação Europeia 1999/5/EC.

**CE-FÖRSÄKRAN**

Härmed försäkras Sitecom Europe BV att denna produkt uppfyller de nödvändiga kraven och andra relevanta villkor EU-direktivet 1999/5/EC.

**OVERENSSTEMMELSESERKLÆRING**

Sitecom Europe BV bekræfter hermed, at dette produkt er i overensstemmelse med væsentlige krav og andre betingelser i henhold til Rådets direktiv 1999/5/EC.

**CE-OVERENSSTEMMELSE**

Sitecom Europe BV erklærer herved at dette produktet er i overensstemmelse med de avgjørende kravene og andre relevante vilkår i den europeiske forskriften 1999/5/EC.

**CE-HYVÄKSYNTÄ**

Täten Sitecom Europe BV ilmoittaa, että tämä tuote on yhdenmukainen direktiivin 1999/5/EC olennaisten vaatimusten ja muiden asiaankuuluvien sopimusehtojen kanssa.

**СООТВЕТСТВИЕ ТРЕБОВАНИЯМ CE**

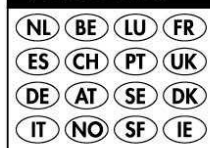
Настоящим компания Sitecom Europe BV заявляет, что ее продукция соответствует основным требованиям и условиям Европейской Директивы 1999/5/EC.

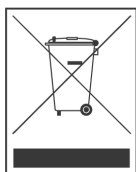
**CERTYFIKAT ZGODNOŚCI CE**

Sitecom Europe BV niniejszym oświadcza, że ten produkt spełnia wszelkie niezbędne wymogi, a także inne istotne warunki dyrektywy europejskiej 1999/5/WE.

**ΣΥΜΜΟΡΦΩΣΗ ΜΕ CE**

Η Sitecom Europe BV δηλώνει, διά του παρόντος, ότι αυτό το προϊόν συμμορφώνεται με τις ουσιαστικές απαιτήσεις και τους λοιπούς όρους του ευρωπαϊκού κανονισμού 1999/5/EC.

**FOR USE IN:**



Revision 2.0

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Note: All the information contained in this manual was correct at the time of publication.

However, as our engineers are always updating and improving the product, your device's software may have a slightly different appearance or modified functionality than presented in this manual.

Introduction

Congratulations on your purchase of the WLR-4002B Wireless Gigabit VPN Router 300N. The WLR-4002B is compliant with 802.11n and up to 6 times faster than standard 802.11g based routers while still being compatible with 802.11g & 802.11b devices. The WLR-4002B is not only a Wireless Access Point, but also doubles as a 7-port full-duplex Gigabit switch that connects your wired-Ethernet devices together at 10/100/1000 Mbps speeds.

At 300 Mbps wireless transmission rate, the Access Point built into the Router uses advanced MIMO (Multi-Input, Multi-Output) technology to transmit multiple streams of data in a single wireless channel, giving you seamless access to multimedia content. The robust RF signal travels farther, eliminates dead spots and extends the network range. For data protection and privacy, the WLR-4002B encodes all wireless transmissions with WEP, WPA, or WPA2 encryption.

With the inbuilt DHCP Server & powerful SPI firewall, the WLR-4002B protects your computers against intruders and most known Internet attacks and also provides safe VPN pass-through. With the incredible speed and QoS function of 802.11n the WLR-4002B is ideal for media-centric applications like streaming video, gaming, and VoIP telephony to run multiple media-intense data streams through the network at the same time, with no degradation in performance.

The router includes Sitecom Cloud Security to protect your home network against cybercrime.

1 Key Features

Features	Advantages
Incredible Data Rate up to 300Mbps*	Heavy data payloads such as MPEG video streaming
IEEE 802.11n Compliant and backwards compatible with 802.11b/g	Fully Interoperable with IEEE 802.11b / IEEE802.11g compliant devices with legacy protection
Seven 10/100/1000 Mbps gigabit Switch Ports (Auto-Crossover)	Scalability, extend your network.
Firewall supports Virtual Server Mapping, DMZ, IP Filter, ICMP Blocking, SPI	Avoids the attacks of Hackers or Viruses from Internet
Support 802.1x authenticator, 802.11i (WPA/WPA2, AES), VPN pass-through	Provide mutual authentication (Client and dynamic encryption keys to enhance security
WDS (Wireless Distribution System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater

** Theoretical wireless signal rate based on IEEE standard of 802.11b, g, n chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate. All specifications are subject to change without notice.*

2 Package Contents

Open the package carefully, and make sure that none of the items listed below are missing. Do not discard the packing materials, in case of return; the unit must be shipped back in its original package.

1. The WLR-4002B Router
2. A 110V~240V to 12V 1A Switching Power Adapter
3. A Quick Install Guide
4. A CD (User's Manual)
5. A Warranty card
6. An UTP cable
7. 2 antennas

3 Cautions

This router's design and manufacturer has your safety in mind. In order to safely and effectively use this router, please read the following before usage.

3.1 Usage Cautions

The user should not modify this router. The environmental temperature should be within +5 ~ +35 degrees Celsius.

3.2 Power

The router's power voltage is DC 12V 1A.

When using this router, please connect the supplied AC adapter or AC adapter cable to the router's power jack. When placing the adapter cable, make sure it can not get damaged or be subject to pressure. To reduce the risk of electric shock, unplug the adapter first before cleaning it. Never connect the adapter to the router in a humid or dusty area. Do not replace the adapter or cable's wire or connector.

3.3 Repair

If the router has a problem, you should take it to an appointed repair centre and let the specialists do the repair. Never repair the router yourself, you might damage the router or endanger yourself.

3.4 Disposing of the Router

When you dispose of the router, be sure to dispose it appropriately. Some countries may regulate disposal of an electrical device, please consult with your local authority.

3.5 Others

When using this router, please do not let it come into contact with water or other liquids. If water is accidentally spilled on the router, please use a dry cloth to absorb the spillage. Electronic products are vulnerable, when using please avoid shaking or hitting the router, and do not press the buttons too hard.

- Do not let the router come into contact with water or other liquid.
- Do not disassemble, repair or change the design of the router, any damage done will not be included in the repair policy.
- Avoid hitting the router with a hard object, avoid shaking the router and stay away from magnetic fields.
- If during electrostatic discharge or a strong electromagnetic field the product will malfunction, unplug the power cable. The product will return to normal performance the next time it is powered on.

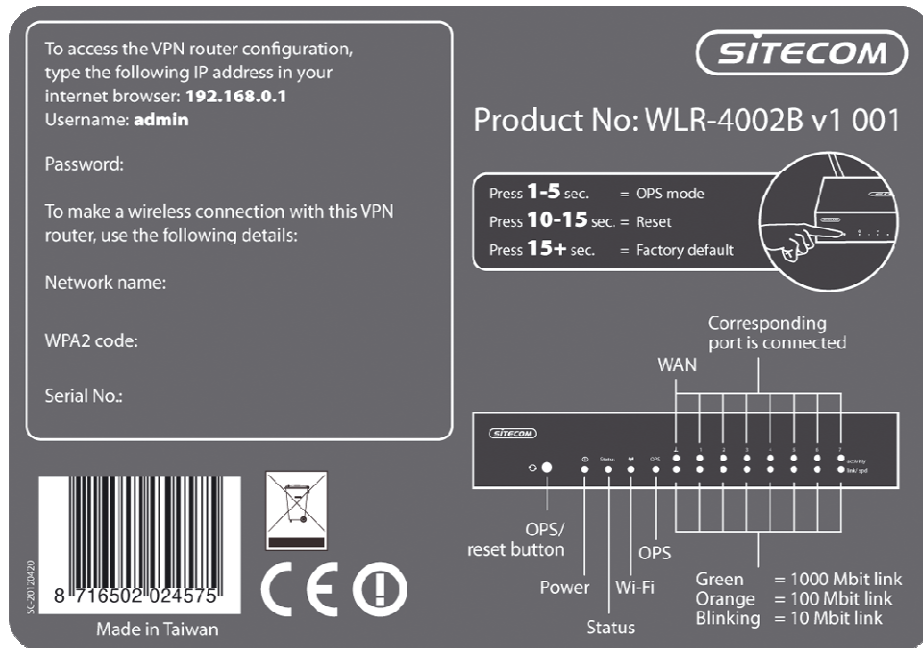
4 Product Layout



Port	Description
Power connector	Connect the 12V DC adapter to this port
LAN (1~7)	Connect your PC's or network devices to this port
WAN	Connect your ADSL/Cable modem to this port

Backlabel

The backlabel describes the IP address, login details, SSID, security code and WPS button functionality.



Button	Description
OPS BUTTON	Press 1-5 seconds for OPS mode Press 10-15 seconds to reset the router Press 15+ Seconds to reset the router to factory defaults.

LED Definition

From left to right.

Port	Description
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
WAN (Blue)	Shows the cable is connected.
WiFi (Blue)	Shows WiFi activity.
Power (Red)	Shows the device is turned on.
OPS (White)	Shows OPS activity.

5 Network + System Requirements

To begin using the WLR-4002B, make sure you meet the following as minimum requirements:

- PC/Notebook.
- Operating System – Microsoft Windows XP/Vista/Seven
- 1 Free Ethernet port.
- WiFi card/USB dongle (802.11 b/g/n) – optional.
- External xDSL (ADSL) or Cable modem with an Ethernet port (RJ-45).
- PC with a Web-Browser (Internet Explorer, Safari, Firefox, Opera)
- Ethernet compatible CAT5e cables.

6 WLR-4002B Placement

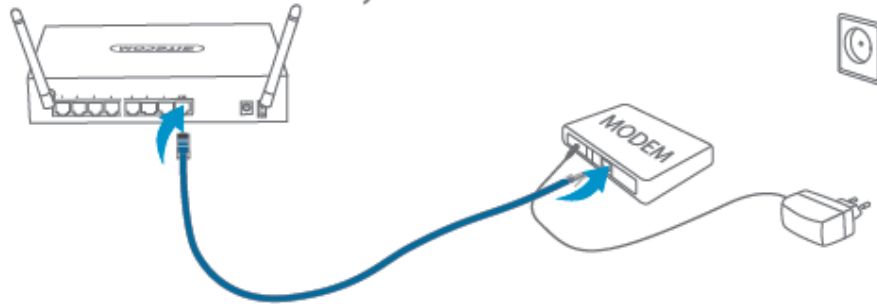
You can place the WLR-4002B on a desk or other flat surface, or you can mount it on a wall. For optimal performance, place your Wireless Broadband Router in the center of your home (or your office) in a location that is away from any potential source of interference, such as a metal wall or microwave oven. This location must be close to a power connection and your ADSL/Cable modem.

7 Setup LAN, WAN

WAN connection:

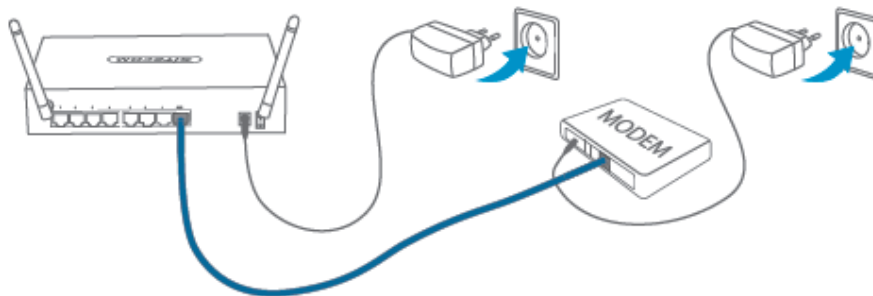
C

Connect the VPN router to your modem



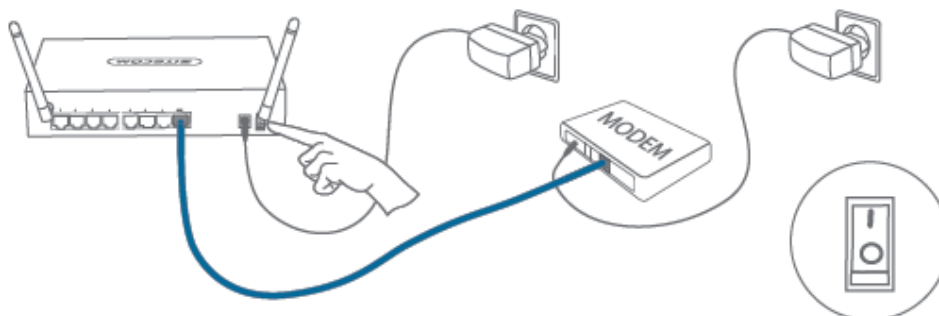
D

Insert power adapter into wall outlet



E

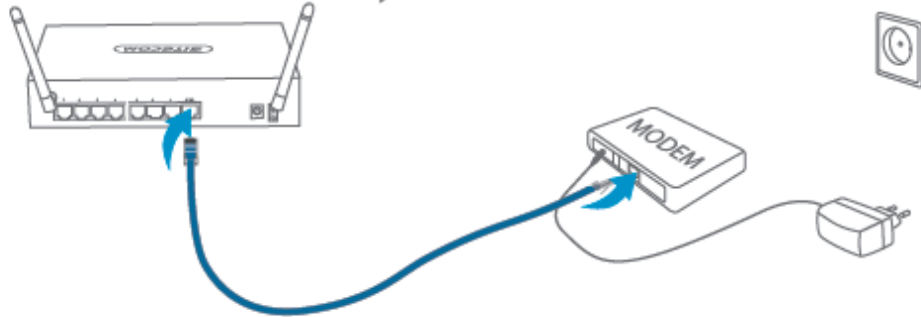
Switch the VPN router on



LAN connection:

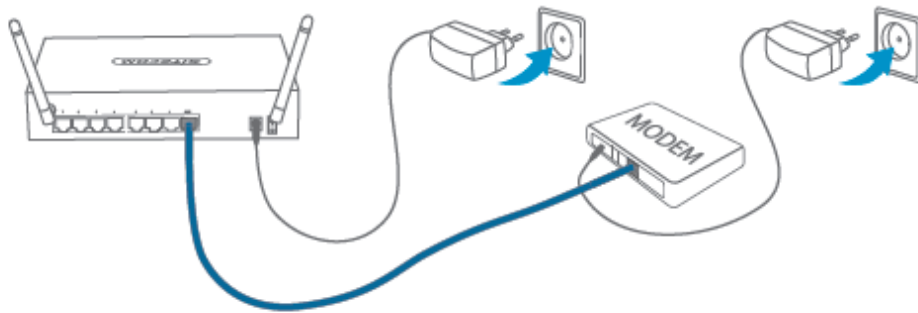
C

Connect the VPN router to your modem



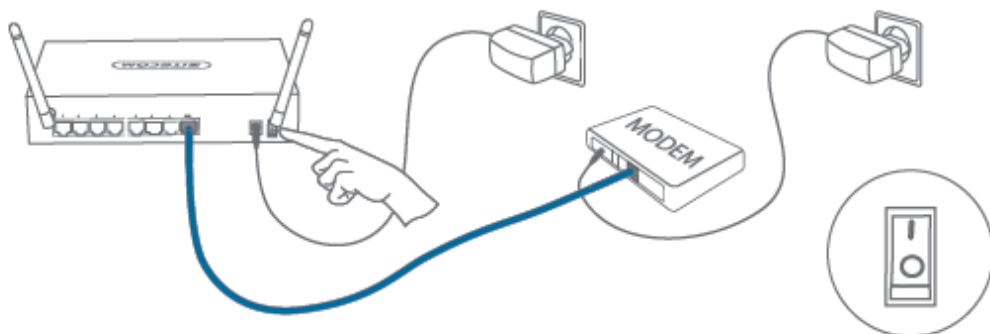
D

Insert power adapter into wall outlet



E

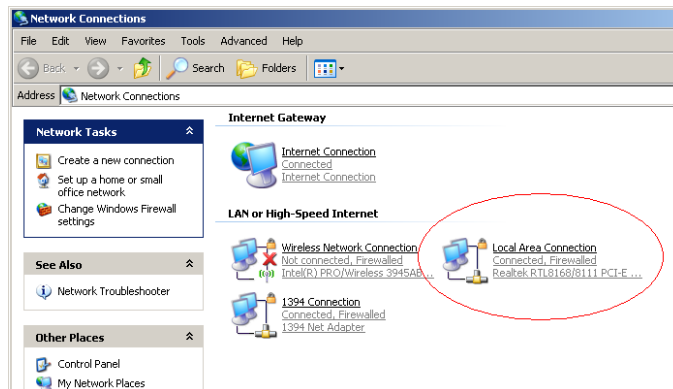
Switch the VPN router on



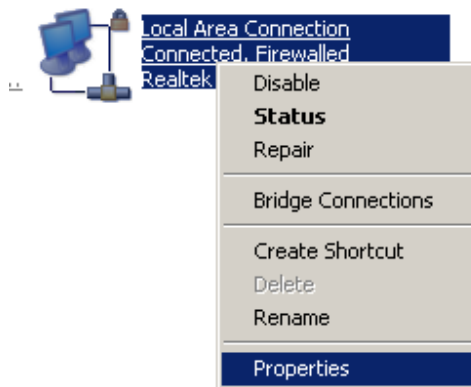
8 PC Network Adapter setup

Windows XP

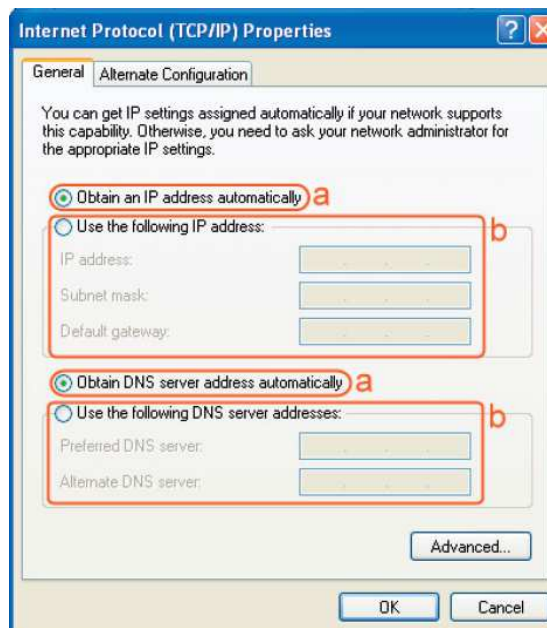
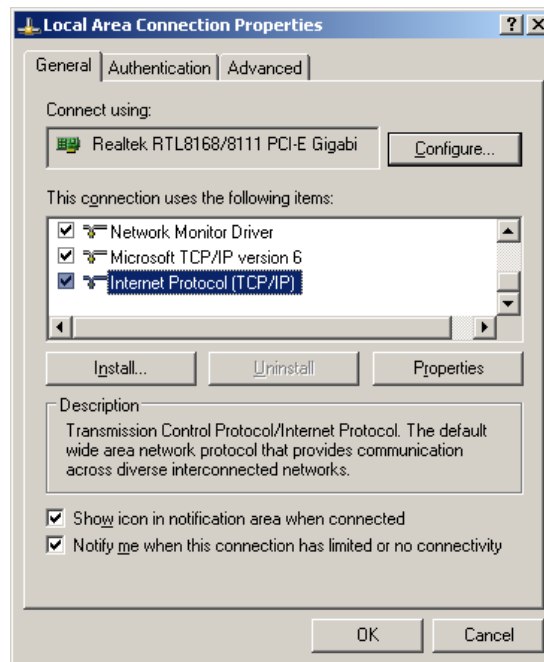
- Enter [Start Menu] → select [Control panel] → select [Network].



- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol (TCP/IP)] =>Click [Properties].

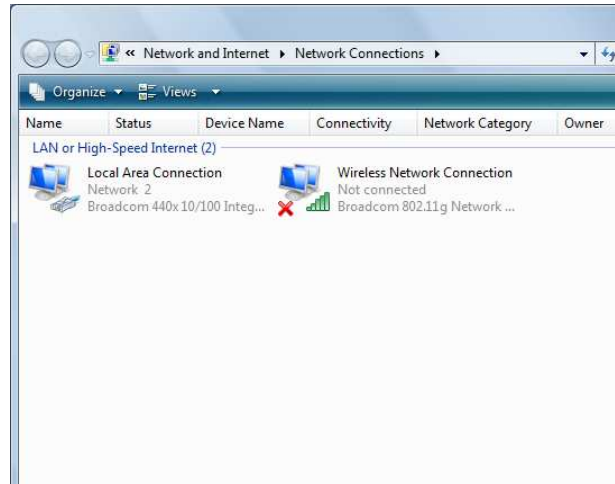


- Select the [General] tab.

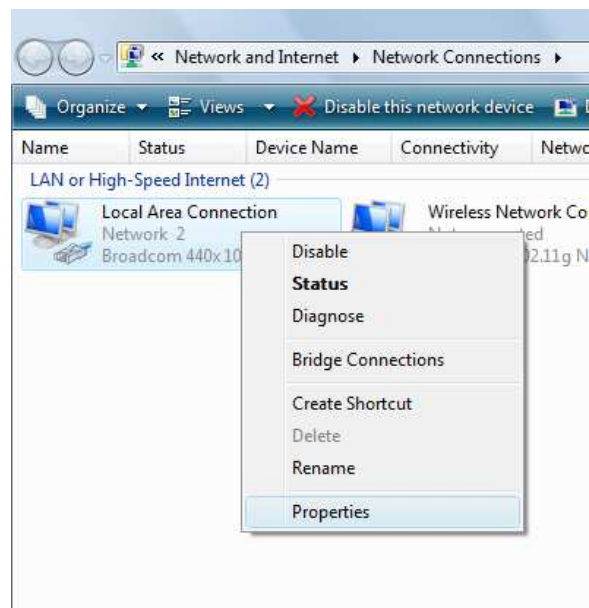
The router supports [DHCP] function, please select both [Obtain an IP address automatically] and [Obtain DNS server address automatically].

Windows Vista/Seven

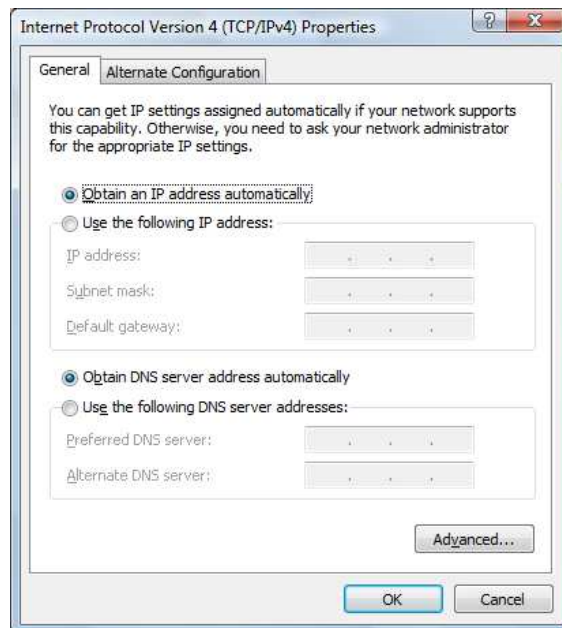
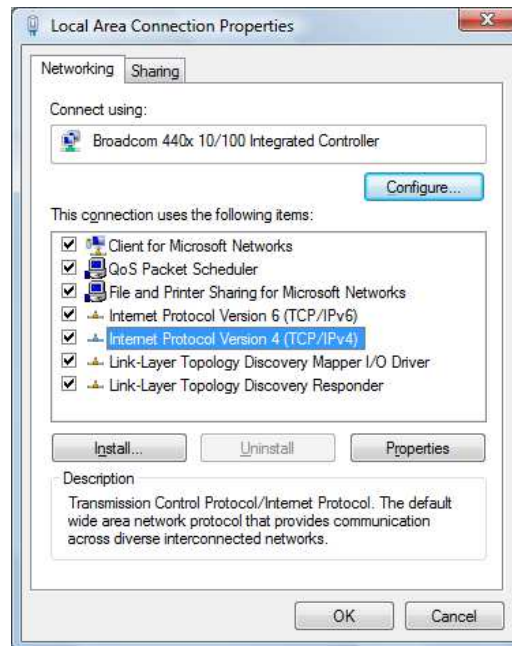
- Enter [Start Menu] → select [Control panel] → select [View network status and tasks] -> select [Manage network connections].



- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol Version 4 (TCP/IPv4)] =>Click [Properties].



- Select the [General] tab.

The router supports [DHCP] function, please select both [Obtain an IP address automatically] and [Obtain DNS server address automatically].

9 Bringing up the WLR-4002B

Connect the supplied power-adaptor to the power inlet port and connect it to a wall outlet. Switch on the power via the switch on the back of the device. The WLR-4002B automatically enters the self-test phase. During self-test phase, the Power LED will be lit continuously to indicate that this product is in normal operation.

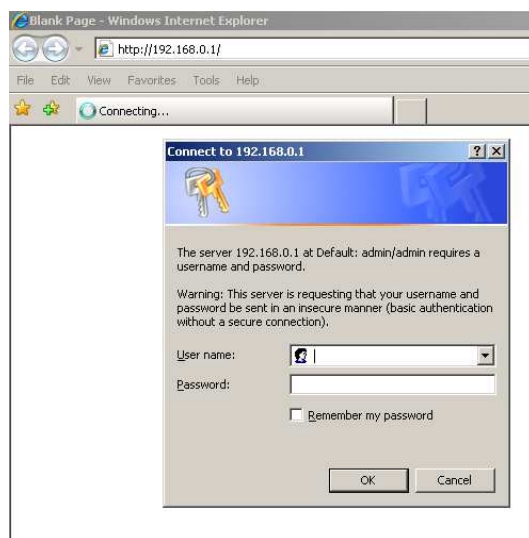
10 Initial Setup WLR-4002B

LOGIN procedure

1. OPEN your browser (e.g. Internet Explorer).



2. Type <http://192.168.0.1> in the address bar and press [Enter]

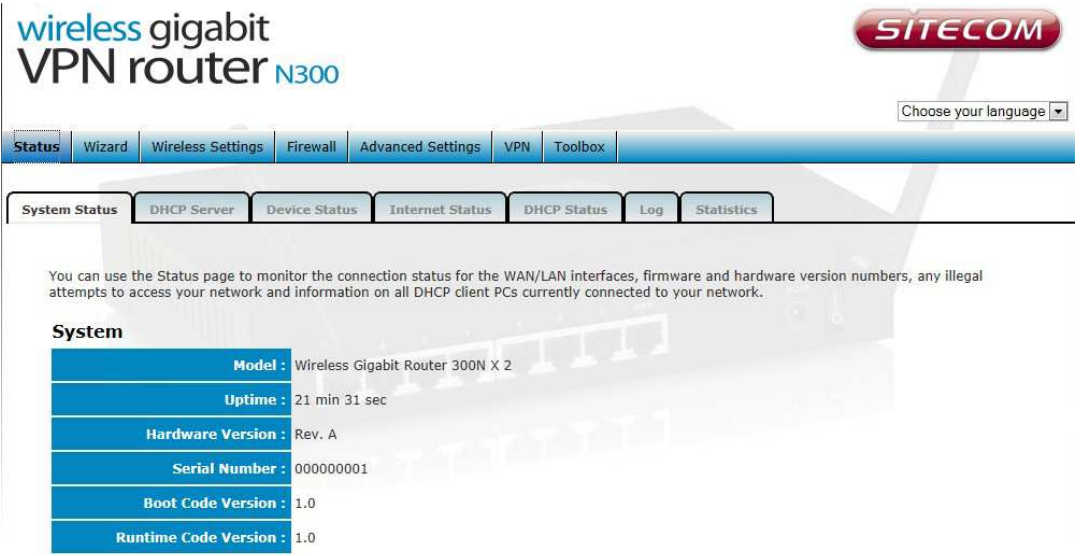


3. Type user name and password (default username is 'admin', the password can be found on the back of the router).



A Windows-style dialog box titled "Connect to 192.168.0.1". It features a blue header with a key icon. The main text area contains a warning: "The server 192.168.0.1 at Default: admin/admin requires a username and password. Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection)." Below this, there are input fields for "User name:" (containing "admin") and "Password:" (masked with dots). A checkbox labeled "Remember my password:" is checked. At the bottom are "OK" and "Cancel" buttons.

4. Click **OK**.
5. You will see the home page of the WLR-4002B.



The screenshot shows the web interface of a Sitecom Wireless Gigabit VPN Router N300. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this is a sub-navigation bar with System Status, DHCP Server, Device Status, Internet Status, DHCP Status, Log, and Statistics. The main content area displays the "System" status, which includes a table of router information.

System	
Model :	Wireless Gigabit Router 300N X 2
Uptime :	21 min 31 sec
Hardware Version :	Rev. A
Serial Number :	000000001
Boot Code Version :	1.0
Runtime Code Version :	1.0

The System status section allows you to monitor the current status of your router the UP time, hardware information, serial number as well as firmware version information is displayed here.

LAN settings

The LAN tab gives you the opportunity to change the IP settings of the WLR-4002B.

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Choose your language ▼

Status Wizard Wireless Settings Firewall Advanced Settings VPN Toolbox

System Status DHCP Server Device Status Internet Status DHCP Status Log Statistics

You can enable the Broadband routers DHCP server to dynamically allocate IP Addresses to your LAN client PCs. The broadband router must have an IP Address for the Local Area Network.

LAN IP

IP Address :	192.168.0.1
IP Subnet Mask :	255.255.255.0
802.1d Spanning Tree :	Disabled ▼
DHCP Server :	Enabled ▼
Lease Time :	Forever ▼

DHCP Server

Start IP :	192.168.0.100
End IP :	192.168.0.200
Domain Name :	sitecomwlr4002

Apply Cancel

Click **<Apply>** at the bottom of this screen to save any changes.

IP address 192.168.0.1. It is the router's LAN IP address (Your LAN clients default gateway IP address).

IP Subnet Mask 255.255.255.0 Specify a Subnet Mask for your LAN segment.

802.1d Spanning Tree is Disabled by default. If the 802.1d Spanning Tree function is enabled, this router will use the spanning tree protocol to prevent network loops.

DHCP Server Enabled by default. You can enable or disable the DHCP server. When DHCP is disabled no ip-addresses are assigned to clients and you have to use static ip-addresses. When DHCP server is enabled your computers will be assigned an ip-address automatically until the lease time expires.

Lease Time Forever. In the Lease Time setting you can specify the time period that the DHCP lends an IP address to your LAN clients. The DHCP will change your LAN client's IP address when this time threshold period is reached.

IP Address Pool You can select a particular IP address range for your DHCP server to issue IP addresses to your LAN Clients.

Note: *default IP range is 192.168.0.100 ~ 192.168.0.200. If you want your PC(s) to have a static/fixed IP address, then you'll have to choose an IP address outside this IP address Pool*

Domain Name You can specify a Domain Name for your LAN or just keep the default (sitecomwlr4002).

Device Status

View the Broadband router's current configuration settings. Device Status displays the configuration settings you've configured in the Wizard / Basic Settings / Wireless Settings section.



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Choose your language ▼

Status Wizard Wireless Settings Firewall Advanced Settings VPN Toolbox

System Status DHCP Server **Device Status** Internet Status DHCP Status Log Statistics

View the current setting status of this device .

Mode :	AP
Channel :	11

SSID_1

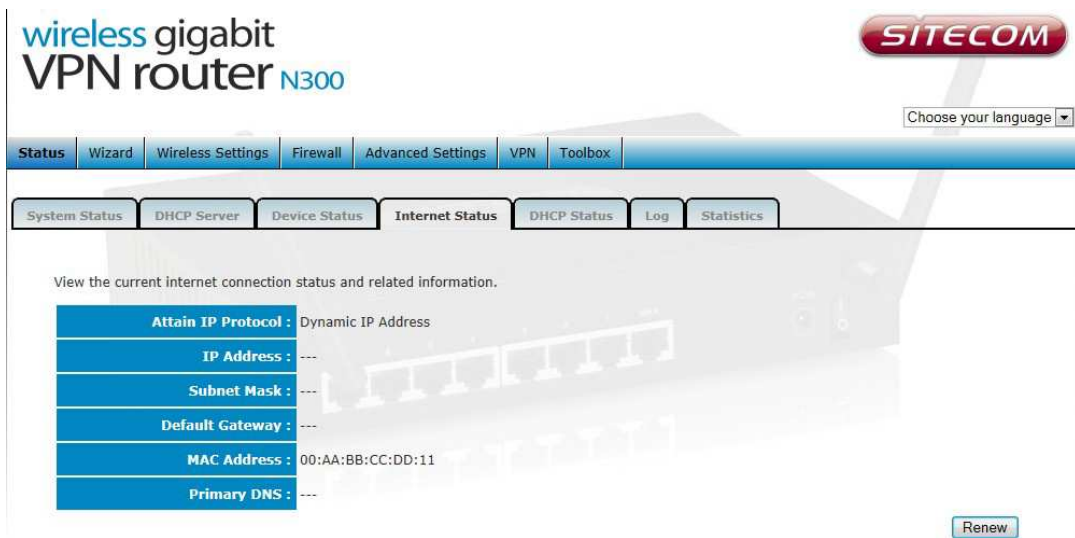
ESSID :	Sitecom465730
Security :	WPA2 pre-shared key
BSSID :	00:0C:F6:46:57:30
Associated Clients :	0

LAN Configuration

IP Address :	192.168.0.1
Subnet Mask :	255.255.255.0
DHCP Server :	Enabled
MAC Address :	00:0C:F6:46:57:30

Internet Status

This page displays whether the WAN port is connected to a Cable/DSL connection. It also displays the router's WAN IP address, Subnet Mask, and ISP Gateway as well as MAC address, the Primary DNS. Press the **Renew** button to renew your WAN IP address.



The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a secondary navigation bar highlights the Internet Status page, with other options like System Status, DHCP Server, Device Status, DHCP Status, Log, and Statistics. The main content area displays the current internet connection status and related information. A table lists the following details:

Attain IP Protocol :	Dynamic IP Address
IP Address :	---
Subnet Mask :	---
Default Gateway :	---
MAC Address :	00:AA:BB:CC:DD:11
Primary DNS :	---

A **Renew** button is located at the bottom right of the information table.

DHCP Client Status

This page shows all DHCP clients (LAN PCs) currently connected to your network. The table shows the assigned IP address, MAC address and expiration time for each DHCP leased client. Use the Refresh button to update the available information.

You can check **Enable Static DHCP IP**. It is possible to add more static DHCP IPs. They are listed in the table **Current Static DHCP Table**. IP can be deleted at will from the table.

Click **apply** button to save the changed configuration.

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Status Wizard Wireless Settings Firewall Advanced Settings VPN Toolbox

System Status DHCP Server Device Status Internet Status DHCP Status Log Statistics

This table shows the assigned IP address, MAC address and expiration time for each DHCP leased client.

IP address	MAC address	Expiration Time
No DHCP.		

Refresh

☐ Enable Static DHCP IP

IP address	MAC address

Add Reset

Current Static DHCP Table:

NO.	IP address	MAC address	Select
-----	------------	-------------	--------

Delete Selected Delete All Reset Apply Cancel

WLR-4002B Log

View the operation log. This page shows the current system log of the Broadband router. It displays any event occurred after system start up. At the bottom of the page, the system log can be saved **<Save>** to a local file for further processing or the system log can be cleared **<Clear>** or it can be refreshed **<Refresh>** to get the most updated information. When the system is powered down, the system log will disappear if not saved to a local file.

The screenshot displays the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a secondary bar shows System Status, DHCP Server, Device Status, Internet Status, DHCP Status, Log (selected), and Statistics. The main content area is titled "View the system operation information. You can see the system start up time, connection process...etc. here." and contains a scrollable log window. The log entries show the system's startup sequence, including HTTP, WAN, WLAN, NET, NTP, DHCP, DNS, and UPnP services, as well as LAN configuration and system version information. At the bottom of the log window are buttons for Save, Clear, and Refresh.

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Status Wizard Wireless Settings Firewall Advanced Settings VPN Toolbox

System Status DHCP Server Device Status Internet Status DHCP Status Log Statistics

View the system operation information. You can see the system start up time, connection process...etc. here.

```
day 1 00:20:38 [SYSTEM]: HTTP, start
day 1 00:20:38 [SYSTEM]: HTTP, Stopping
day 1 00:00:11 [SYSTEM]: WAN, No PHY Link
day 1 00:00:08 [SYSTEM]: WAN, start DHCP mode
day 1 00:00:05 [SYSTEM]: WAN, stop DHCP mode
day 1 00:00:04 [SYSTEM]: WLAN, start LLTD
day 1 00:00:04 [SYSTEM]: HTTP, start
day 1 00:00:03 [SYSTEM]: NET, start Firewall
day 1 00:00:03 [SYSTEM]: NET, start NAT
day 1 00:00:03 [SYSTEM]: NTP, start NTP Client
day 1 00:00:03 [SYSTEM]: DHCP, start DHCP Server
day 1 00:00:02 [SYSTEM]: DNS, start DNS Proxy
day 1 00:00:02 [SYSTEM]: WAN, No PHY Link
day 1 00:00:02 [SYSTEM]: WAN, start DHCP mode
day 1 00:00:02 [SYSTEM]: UPnP, start
day 1 00:00:01 [SYSTEM]: WLAN[2.4G], CountryRegion = 1
day 1 00:00:01 [SYSTEM]: LAN, IP address=192.168.0.1
day 1 00:00:01 [SYSTEM]: LAN, start
day 1 00:00:01 [SYSTEM]: BR, start
day 1 00:00:01 [SYSTEM]: SYS, Application Version: 1.0.0
```

Save Clear Refresh

Statistics

Shows the counters of packets sent and received on WAN, LAN & WLAN.

The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The page title is "wireless gigabit VPN router N300". The Sitecom logo is in the top right corner. A language selection dropdown is labeled "Choose your language". The navigation menu includes: Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. The sub-menu includes: System Status, DHCP Server, Device Status, Internet Status, DHCP Status, Log, and Statistics (which is the active tab). The main content area displays packet counters for three network types: Wireless LAN, Ethernet LAN, and Ethernet WAN. Each type shows "Sent Packets" and "Received Packets" counts. A "Refresh" button is located at the bottom left of the statistics section.

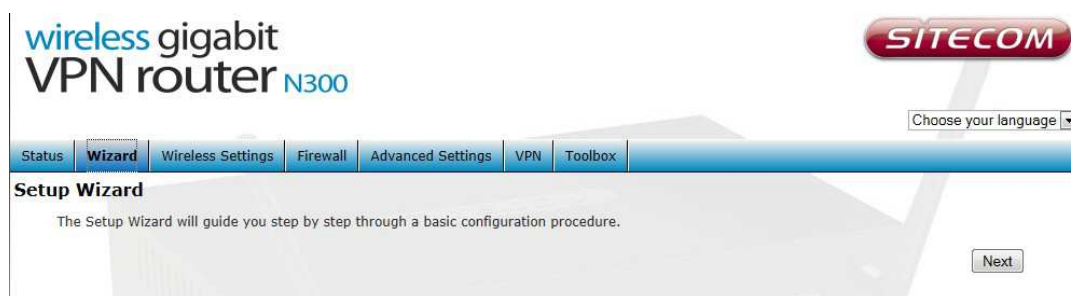
This page shows the packet counters for transmission and reception regarding to networks.

Wireless LAN :	Sent Packets	3
	Received Packets	9
Ethernet LAN :	Sent Packets	3179
	Received Packets	2592
Ethernet WAN :	Sent Packets	0
	Received Packets	0

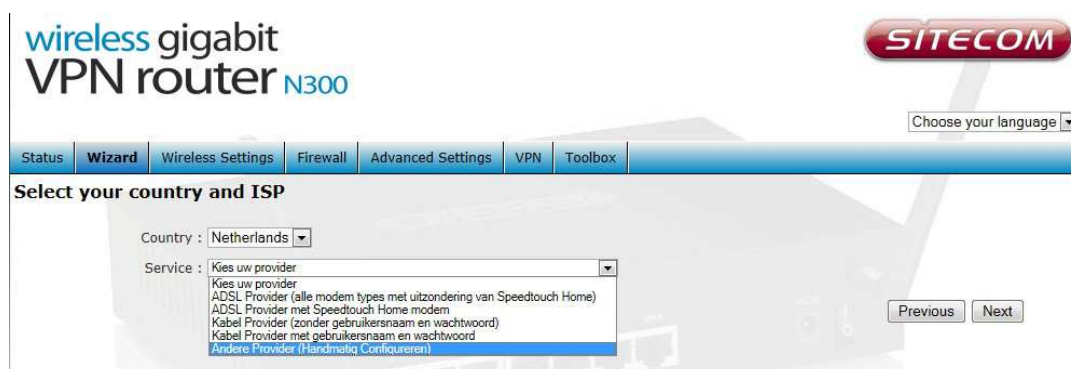
[Refresh](#)

11 Configuration Wizard

Click **Wizard** to configure the router. The Setup wizard will now be displayed; check that the modem is connected and click **Next**.



Select your country from the Country list. Select your internet provider. Click **Next**.



Depending on the chosen provider, you may need to enter your user name and password, MAC address or hostname in the following window. After you have entered the correct information, click **Next**.

wireless gigabit
VPN router N300

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Status **Wizard** Wireless Settings Firewall Advanced Settings VPN Toolbox

Please, enter the data which is supplied by your ISP.

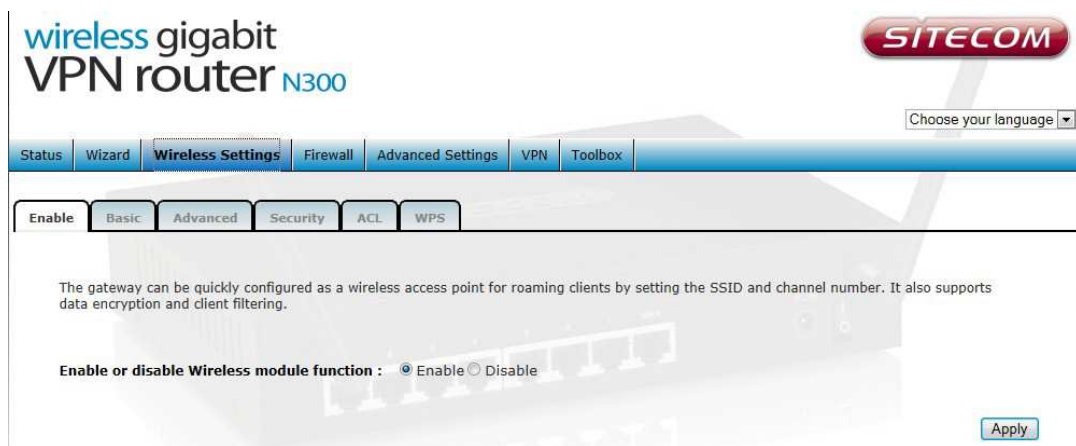
Login Method :	-- Select one -- ▾
Username :	
Password :	
Service :	
MTU :	1492 (512 <= MTU Value <= 1492)
Connection Type :	Keep connection ▾ Connect Disconnect
Idle Time :	10 (1-1000 Minutes)

Click **APPLY** to complete the configuration.

12 Wireless Settings

You can set parameters that are used for the wireless stations to connect to this router. The parameters include Mode, ESSID, Channel Number and Associated Client.

Wireless Function



The screenshot shows the configuration interface for a Sitecom N300 wireless gigabit VPN router. The page title is "wireless gigabit VPN router N300" with the Sitecom logo. A language selection dropdown is in the top right. The main navigation bar includes Status, Wizard, **Wireless Settings**, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a sub-navigation bar has tabs for Enable, Basic, Advanced, Security, ACL, and WPS. The "Enable" tab is selected. The content area contains a descriptive paragraph: "The gateway can be quickly configured as a wireless access point for roaming clients by setting the SSID and channel number. It also supports data encryption and client filtering." Below this is a section titled "Enable or disable Wireless module function :" with two radio buttons: "Enable" (selected) and "Disable". An "Apply" button is located at the bottom right of the configuration area.

Enable or Disable Wireless function here. Click **Apply** and wait for module to be ready & loaded.

Basic Settings

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Status Wizard **Wireless Settings** Firewall Advanced Settings VPN Toolbox

Enable Basic **Advanced** Security ACL WPS

This page allows you to define ESSID, and Channel for the wireless connection. These parameters are used for the wireless stations to connect to the Access Point.

Mode :	AP ▼
Power Saving :	☐ Enable ☒ Disable
Band :	2.4 GHz (B+G+N) ▼
Enable SSID# :	1 ▼
SSID1 :	Sitecom465730
Channel :	11 ▼

Apply Cancel

Mode Allows you to set AP or WDS mode.

Band Allows you to set the AP fixed at 802.11b or 802.11g mode. You can also select B+G mode to allow 802.11b and 802.11g clients at the same time.

Enable SSID # Allows you to enable up to four SSIDs for this router.

SSID This is the name of the wireless signal which is broadcasted. All the devices in the same wireless LAN should have the same ESSID.

Channel The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel. When 'Auto' is selected the router will automatically determine which wireless channel is most suitable.

Advanced Settings

This tab allows you to set the advanced wireless options. The options included are Authentication Type, Fragment Threshold, RTS Threshold, Beacon Interval, and Preamble Type. You should not change these parameters unless you know what effect the changes will have on the router.

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Status Wizard **Wireless Settings** Firewall Advanced Settings VPN Toolbox

Enable Basic **Advanced** Security ACL WPS

These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Broadband router.

Fragment Threshold :	2346	(256-2346)
RTS Threshold :	2347	(1-2347)
Beacon Interval :	100	(20-1024 ms)
DTIM Period :	1	(1-255)
Data Rate :	Auto ▼	
N Data Rate :	Auto ▼	
Channel Bandwidth :	☒ Auto 20/40 MHZ ☐ 20 MHZ	
Preamble Type :	☒ Long Preamble ☐ Short Preamble	
CTS Protection :	☒ Auto ☐ Always ☐ None	
Tx Power :	100 % ▼	

Apply Cancel

Authentication Type There are two authentication types: "Open System" and "Shared Key". When you select "Open System", wireless stations can associate with this wireless router without WEP encryption. When you select "Shared Key", you should also setup a WEP key in the "Encryption" page. After this has been done, make sure the wireless clients that you want to connect to the device are also setup with the same encryption key.

Fragment Threshold "Fragment Threshold" specifies the maximum size of a packet during the fragmentation of data to be transmitted. If you set this value too low, it will result in bad performance.

RTS Threshold When the packet size is smaller than the RTS threshold, the wireless router will not use the RTS/CTS mechanism to send this packet.

Beacon Interval is the interval of time that this wireless router broadcasts a beacon. A Beacon is used to synchronize the wireless network.

Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets. The access point will use the highest possible selected transmission rate to transmit the data packets.

N Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets for N compliant wireless nodes. Highest to lowest data rate can be fixed.

Channel Bandwidth is the range of frequencies that will be used.

Preamble Type The "Long Preamble" can provide better wireless LAN compatibility while the "Short Preamble" can provide better wireless LAN performance.

CTS Protection: It is recommended to enable the protection mechanism. This mechanism can decrease the rate of data collision between 802.11b and 802.11g wireless stations. When the protection mode is enabled, the throughput of the AP will be a little lower due to a lot of frame-network that is transmitted.

TX Power can be set to a bare minimum or maximum power.

Security

This Access Point provides complete wireless LAN security functions, included are WEP, IEEE 802.11x, IEEE 802.11x with WEP, WPA with pre-shared key and WPA with RADIUS. With these security functions, you can prevent your wireless LAN from illegal access. Please make sure your wireless stations use the same security function, and are setup with the same security key.

SSID Selection Here you choose the SSID for which you wish to set the security.

Broadcast ESSID If you enabled "Broadcast ESSID", every wireless station located within the coverage of this access point can discover this access point easily. If you are building a public wireless network, enabling this feature is recommended. Disabling "Broadcast ESSID" can provide better security.

WMM WiFi Multi Media if enabled supports QoS for experiencing better audio, video and voice in applications.

wireless gigabit
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Status Wizard **Wireless Settings** Firewall Advanced Settings VPN Toolbox

Enable Basic Advanced **Security** ACL WPS

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection :	Sitecom465730 ▼
Broadcast ESSID :	Enable ▼
WMM :	Enable ▼
Encryption :	WPA pre-shared key ▼
WPA Type :	☐ WPA(TKIP) ☒ WPA2(AES) ☐ WPA2 Mixed
Pre-shared Key Type :	Passphrase ▼
Pre-sharedKey :	3KHB8LAPRSP3

Apply Cancel

Disable

When you choose to disable encryption, it is very insecure to operate the router.



The screenshot shows the configuration interface for a Sitecom N300 wireless gigabit VPN router. The page is titled "wireless gigabit VPN router N300" and features the Sitecom logo. A navigation bar includes tabs for Status, Wizard, Wireless Settings (selected), Firewall, Advanced Settings, VPN, and Toolbox. Below this, a sub-navigation bar shows tabs for Enable, Basic, Advanced, Security (selected), ACL, and WPS. A language selection dropdown is set to "Choose your language".

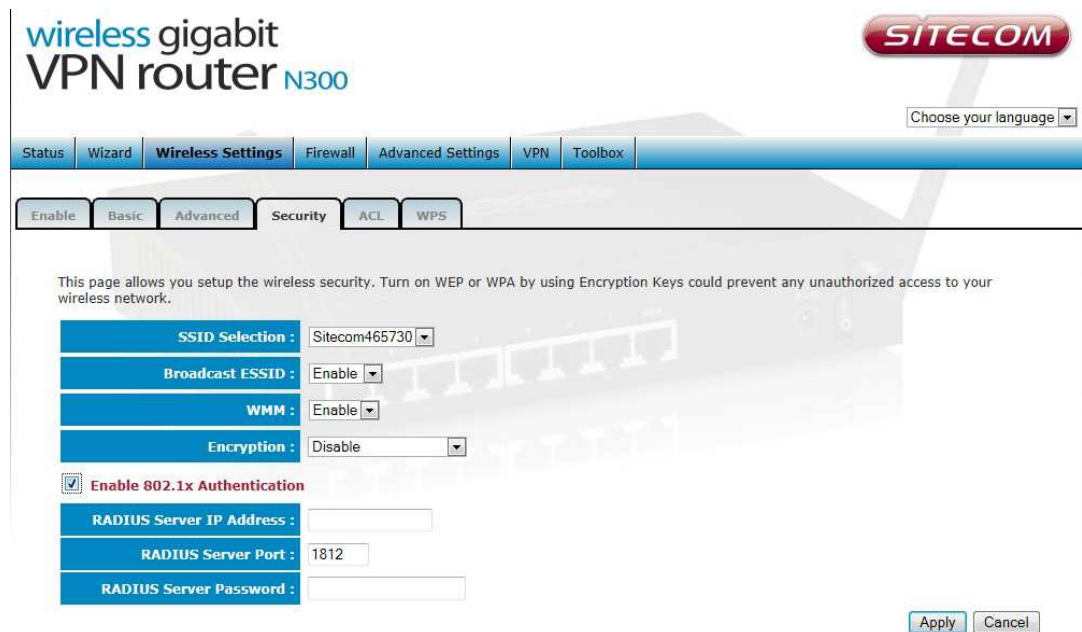
The main content area is titled "Wireless Security" and contains the following settings:

- SSID Selection :** Sitecom465730
- Broadcast ESSID :** Enable
- WMM :** Enable
- Encryption :** Disable

Below these settings, there is a checkbox labeled "Enable 802.1x Authentication" which is currently unchecked. At the bottom right, there are "Apply" and "Cancel" buttons.

Enable 802.1x Auth

IEEE 802.1x is an authentication protocol. Every user must use a valid account to login to this Access Point before accessing the wireless LAN. The authentication is processed by a RADIUS server. This mode only authenticates users by IEEE 802.1x, but it does not encrypt the data during communication.



The screenshot shows the configuration interface for a Sitecom N300 wireless gigabit VPN router. The page is titled "wireless gigabit VPN router N300" and features the Sitecom logo. A navigation bar includes tabs for Status, Wizard, Wireless Settings (selected), Firewall, Advanced Settings, VPN, and Toolbox. Below this, a sub-navigation bar shows Enable, Basic, Advanced, Security (selected), ACL, and WPS. The main content area is titled "This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network." It contains several configuration fields: SSID Selection (Sitecom465730), Broadcast ESSID (Enable), WMM (Enable), Encryption (Disable), and a checked checkbox for "Enable 802.1x Authentication". Below this, there are fields for RADIUS Server IP Address, RADIUS Server Port (1812), and RADIUS Server Password. At the bottom right, there are "Apply" and "Cancel" buttons.

wireless gigabit
VPN router N300

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Choose your language ▼

Status Wizard **Wireless Settings** Firewall Advanced Settings VPN Toolbox

Enable Basic Advanced **Security** ACL WPS

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection : Sitecom465730 ▼

Broadcast ESSID : Enable ▼

WMM : Enable ▼

Encryption : Disable ▼

☒ **Enable 802.1x Authentication**

RADIUS Server IP Address :

RADIUS Server Port : 1812

RADIUS Server Password :

Apply Cancel

WEP

When you select 64-bit or 128-bit WEP key, you have to enter WEP keys to encrypt data. You can generate the key by yourself and enter it. You can enter four WEP keys and select one of them as a default key. Then the router can receive any packets encrypted by one of the four keys.

The screenshot shows the 'Security' tab of a router's configuration interface. The 'WMM' and 'Broadcast ESSID' are set to 'Enable'. The 'Encryption' is set to 'WEP'. Under 'Authentication type', 'Open System' is selected. 'Key Length' is set to '64-bit' and 'Key Type' is set to 'ASCII (5 characters)'. 'Default Key' is set to 'Key 1'. There are four empty input fields for 'Encryption Key 1' through 'Encryption Key 4'. At the bottom left, there is a checkbox for 'Enable 802.1x Authentication' which is currently unchecked. At the bottom right, there are 'Apply' and 'Cancel' buttons.

Enable	Basic	Advanced	Security	ACL	WPS
--------	-------	----------	----------	-----	-----

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection : Sitecom465730

Broadcast ESSID : Enable

WMM : Enable

Encryption : WEP

Authentication type : ☒ Open System ☐ Shared Key ☐ Auto

Key Length : 64-bit

Key Type : ASCII (5 characters)

Default Key : Key 1

Encryption Key 1 :

Encryption Key 2 :

Encryption Key 3 :

Encryption Key 4 :

☐ Enable 802.1x Authentication

Apply Cancel

Key Length You can select the WEP key length for encryption, 64-bit or 128-bit. The larger the key will be the higher level of security is used, but the throughput will be lower.

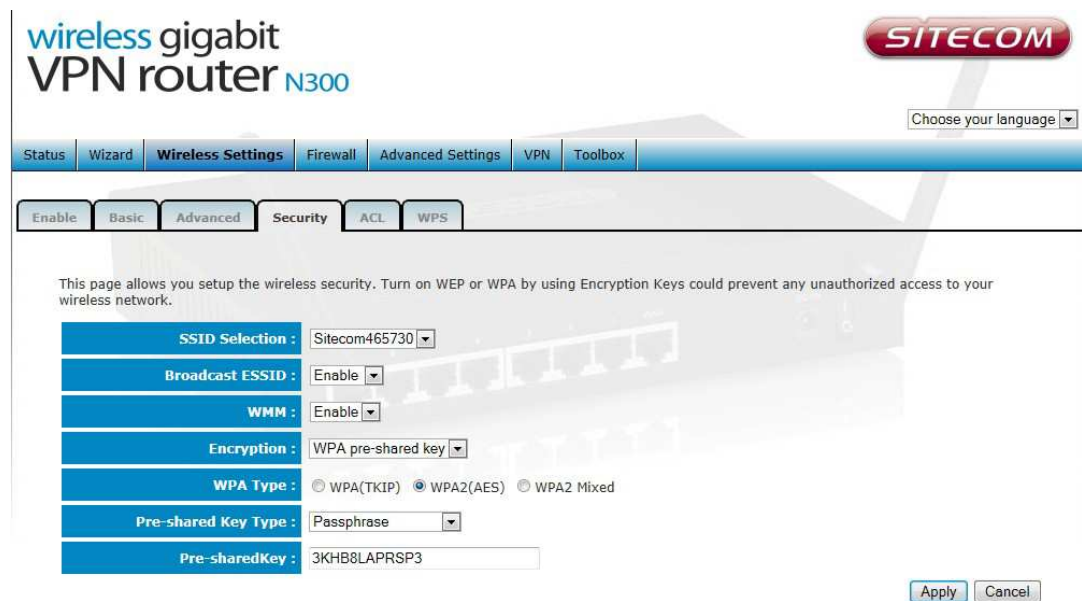
Key Format You may select ASCII Characters (alphanumeric format) or Hexadecimal Digits (in the "A-F", "a-f" and "0-9" range) to be the WEP Key.

Key1 - Key4 The WEP keys are used to encrypt data transmitted in the wireless network. Use the following rules to setup a WEP key on the device. 64-bit WEP: input 10-digits Hex values (in the "A-F", "a-f" and "0-9" range) or 5-digit ASCII character as the encryption keys. 128-bit WEP: input 26-digit Hex values (in the "A-F", "a-f" and "0-9" range) or 13-digit ASCII characters as the encryption keys.

Click **"Apply"** at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPA Pre-shared Key

Wi-Fi Protected Access (WPA) is an advanced security standard. You can use a pre-shared key to authenticate wireless stations and encrypt data during communication. It uses TKIP or CCMP (AES) to change the encryption key frequently. So the encryption key is not easy to be cracked by hackers. This is the best security available.



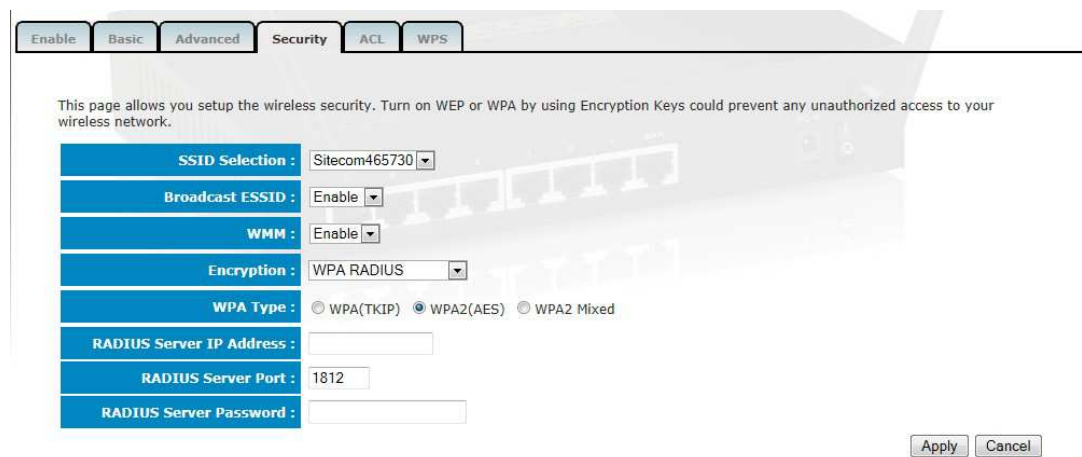
The screenshot shows the configuration interface for a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, **Wireless Settings**, Firewall, Advanced Settings, VPN, and Toolbox. Below this, there are tabs for Enable, Basic, Advanced, Security, ACL, and WPS. The main content area is titled "This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network." and contains the following settings:

SSID Selection :	Sitecom465730
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WPA pre-shared key
WPA Type :	☐ WPA(TKIP) ☒ WPA2(AES) ☐ WPA2 Mixed
Pre-shared Key Type :	Passphrase
Pre-sharedKey :	3KHB8LAPRSP3

At the bottom right, there are "Apply" and "Cancel" buttons.

WPA-Radius

Wi-Fi Protected Access (**WPA**) is an advanced security standard. You can use an external RADIUS server to authenticate wireless stations and provide the session key to encrypt data during communication. It uses **TKIP** or CCMP (**AES**) to change the encryption key frequently. Press **Apply** button when you are done.



The screenshot shows a web interface for configuring wireless security. At the top, there are tabs: 'Enable', 'Basic', 'Advanced', 'Security' (selected), 'ACL', and 'WPS'. Below the tabs, a message states: 'This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.' The configuration fields are as follows:

SSID Selection :	Sitecom465730
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WPA RADIUS
WPA Type :	☐ WPA(TKIP) ☒ WPA2(AES) ☐ WPA2 Mixed
RADIUS Server IP Address :	
RADIUS Server Port :	1812
RADIUS Server Password :	

At the bottom right, there are 'Apply' and 'Cancel' buttons.

ACL

This wireless router supports MAC Address Control, which prevents unauthorized clients from accessing your wireless network.

The screenshot shows the web interface of a Sitecom wireless gigabit VPN router N300. The top navigation bar includes tabs for Status, Wizard, Wireless Settings (selected), Firewall, Advanced Settings, VPN, and Toolbox. Below this, there are sub-tabs for Enable, Basic, Advanced, Security, ACL (selected), and WPS. A message states: "For security reason, the Access Point features MAC Address Filtering which only allows authorized MAC Addresses to associate with the Access Point." Below this is the "MAC Address Filtering Table" with columns: NO., MAC address, Comment, and Select. The table is currently empty. Below the table are buttons for "Delete Selected", "Delete All", and "Reset". There is a checkbox for "Enable Wireless Access Control" which is checked. Below this is a "New:" section with input fields for "MAC address:" and "Comment:", and buttons for "Add" and "Reset". At the bottom right, there are "Apply" and "Cancel" buttons.

Enable wireless access control Enables the wireless access control function

Adding an address into the list Enter the "MAC Address" and "Comment" of the wireless station to be added and then click "Add". The wireless station will now be added into the "Current Access Control List" below. If you are having any difficulties filling in the fields, just click "Clear" and both "MAC Address" and "Comment" fields will be cleared.

Remove an address from the list If you want to remove a MAC address from the "Current Access Control List", select the MAC address that you want to remove in the list and then click "Delete Selected". If you want to remove all the MAC addresses from the list, just click the "Delete All" button. Click "Reset" will clear your current selections.

Click <Apply> at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPS

Wi-Fi Protected Setup (WPS) is the simplest way to establish a connection between the wireless clients and the wireless router. You don't have to select the encryption mode and fill in a long encryption passphrase every time when you try to setup a wireless connection. You only need to press a button on both wireless client and wireless router, and WPS will do the rest for you.

The screenshot shows the web configuration interface for a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes tabs for Status, Wizard, Wireless Settings (selected), Firewall, Advanced Settings, VPN, and Toolbox. Below this, there are sub-tabs: Enable, Basic, Advanced, Security, ACL, and WPS (selected). The main content area is titled 'WPS : ☒ Enable'. Underneath, there is a section for 'Wi-Fi Protected Setup Information' with the following details:

WPS Current Status :	Configured	Release configuration
Self Pin Code :	46098405	
SSID :	Sitecom465730	
Authentication Mode :	WPA2 pre-shared key	
Passphrase Key :	3KHB8LAPRSP3	
WPS Via Push Button :	Start to Process	
WPS Via PIN :		Start to Process

The wireless router supports two types of WPS: WPS via Push Button and WPS via PIN code. If you want to use the Push Button, you have to push a specific button on the wireless client or in the utility of the wireless client to start the WPS mode, and switch the wireless router to WPS mode. You can simply push the WPS button of the wireless router, or click the 'Start to Process' button in the web configuration interface. If you want to use the PIN code, you have to know the PIN code of the wireless client and switch it to WPS mode, then fill-in the PIN code of the wireless client through the web configuration interface of the wireless router.

WPS Check the box to enable WPS function and uncheck it to disable the WPS function.

WPS Current Status If the wireless security (encryption) function of this wireless router is properly set, you'll see a 'Configured' message here. Otherwise, you'll see 'UnConfigured'.

Self Pin Code This is the WPS PIN code of the wireless router. You may need this information when connecting to other WPS-enabled wireless devices.

SSID This is the network broadcast name (SSID) of the router.

Authentication Mode It shows the active authentication mode for the wireless connection.

Passphrase Key It shows the passphrase key that is randomly generated by the wireless router during the WPS process. You may need this information when using a device which doesn't support WPS.

WPS via Push Button Press the button to start the WPS process. The router will wait for the WPS request from the wireless devices within 2 minutes.

WPS via PIN You can fill-in the PIN code of the wireless device and press the button to start the WPS process. The router will wait for the WPS request from the wireless device within 2 minutes.

13 Firewall Settings

The Broadband router provides extensive firewall protection by restricting connection parameters, thus limiting the risk of hacker attacks, and defending against a wide array of common Internet attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a Demilitarized Zone (DMZ).

Note: To enable the Firewall settings select Enable and click Apply

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Choose your language ▼

Status Wizard Wireless Settings **Firewall** Advanced Settings VPN Toolbox

Enable DMZ DoS Access URL block

The Broadband router provides extensive firewall protection by restricting connection parameters, thus limiting the risk of a hacker attack, and defending against a wide array of common attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a Demilitarized Zone (DMZ).

Enable or disable Firewall module function : ☒ Enable ☐ Disable

Apply

DMZ

If you have a client PC that cannot run an Internet application (e.g. Games) properly from behind the NAT firewall, then you can open up the firewall restrictions to unrestricted two-way Internet access by defining a DMZ Host. The DMZ function allows you to re-direct all packets going to your WAN port IP address to a particular IP address in your LAN. The difference between the virtual server and the DMZ function is that the virtual server re-directs a particular service/Internet application (e.g. FTP, websites) to a particular LAN client/server, whereas DMZ re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client/server.

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Choose your language ▼

Status Wizard Wireless Settings **Firewall** Advanced Settings VPN Toolbox

Enable **DMZ** DoS Access URL block

If you have a local client PC that cannot run an Internet application properly from behind the NAT firewall, you can open unrestricted two-way Internet access for this client by defining a Virtual DMZ Host.

☐ Enable DMZ

Public IP Address	Client PC IP Address
☒ Dynamic IP Session 1 ▼	
☐ Static IP	

DMZ table:

NO.	Public IP Address	Client PC IP Address	Select
-----	-------------------	----------------------	--------

Enable DMZ Enable/disable DMZ

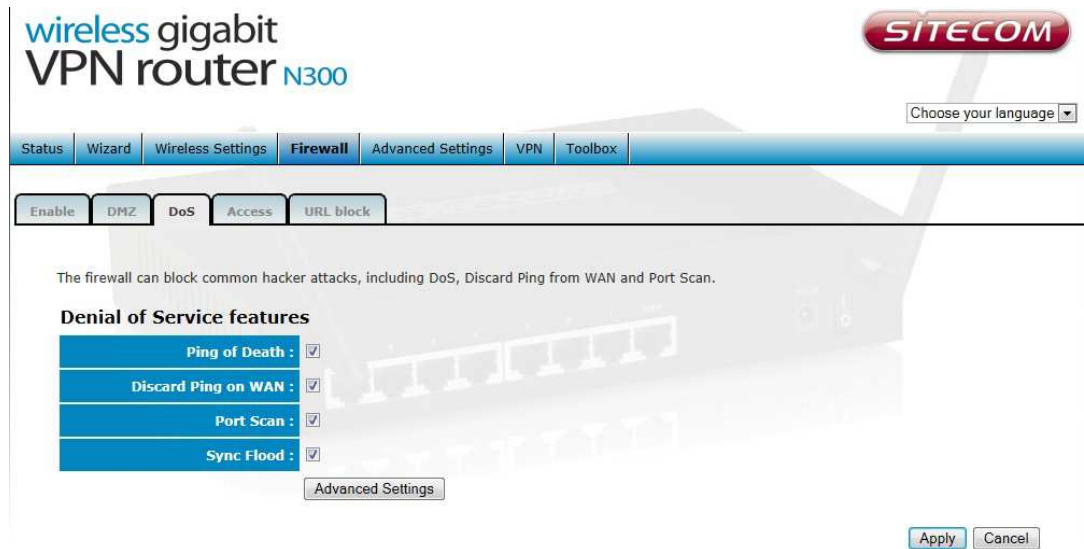
Public IP Address The IP address of the WAN port or any other Public IP addresses given to you by your ISP

Client PC IP Address Fill-in the IP address of a particular host in your LAN that will receive all the packets originally going to the WAN port/Public IP address above.

Click **<Apply>** at the bottom of the screen to save the above configurations.

Denial of Service (DoS)

The Broadband router's firewall can block common hacker attacks, including Denial of Service, Ping of Death, Port Scan and Sync Flood. If Internet attacks occur the router can log the events.



Ping of Death Protections from Ping of Death attack

Discard Ping From WAN The router's WAN port will not respond to any Ping requests

Port Scan Protects the router from Port Scans.

Sync Flood Protects the router from Sync Flood attack.

Access

You can restrict users from accessing certain Internet applications/services (e.g. Internet websites, email, FTP etc.), Access Control allows users to define the traffic type permitted in your LAN. You can control which PC client can have access to these services.

Choose your language ▼

Status Wizard Wireless Settings **Firewall** Advanced Settings VPN Toolbox

Enable DMZ DoS **Access** URL block

Access Control allows users to define the traffic type permitted or not permitted in your LAN. You can control which PC uses what services or has access to.
If both MAC filtering and IP filtering are enabled, the MAC filtering table will be checked first.

☐ Enable MAC filtering ☒ Deny ☐ Allow

Client PC MAC Address	Comment

Add Reset

MAC Filtering table:

NO.	Client PC MAC Address	Comment	Select
-----	-----------------------	---------	--------

Delete Selected Delete All Reset

☐ Enable IP Filtering Table ☒ Deny ☐ Allow

NO.	PC Description	PC IP Address	Client Service	Protocol	Port range	Select
-----	----------------	---------------	----------------	----------	------------	--------

Add Delete Selected Delete All

Apply Cancel

Deny If you select "Deny" then all clients will be allowed to access Internet except for the clients in the list below.

Allow If you select "Allow" then all clients will be denied to access Internet except for the PCs in the list below.

Filter client PCs by IP Fill in "IP Filtering Table" to filter PC clients by IP.

Add PC You can click Add PC to add an access control rule for users by IP addresses.

Remove PC If you want to remove some PCs from the "IP Filtering Table", select the PC you want to remove in the table and then click "Delete

Selected". If you want to remove all PCs from the table, just click the "Delete All" button.

Filter client PC by MAC Check "Enable MAC Filtering" to enable MAC Filtering.

Add PC Fill in "Client PC MAC Address" and "Comment" of the PC that is allowed to access the Internet, and then click "Add". If you find any typo before adding it and want to retype again, just click "Reset" and the fields will be cleared.

Remove PC If you want to remove some PC from the "MAC Filtering Table", select the PC you want to remove in the table and then click "Delete Selected". If you want to remove all PCs from the table, just click the "Delete All" button. If you want to clear the selection and re-select again, just click "Reset".

Click <**Apply**> at the bottom of the screen to save the above configuration.

URL block

You can block access to some Web sites from particular PCs by entering a full URL address or just keywords of the Web site.

The screenshot shows the web interface of a Sitecom wireless gigabit VPN router N300. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. The 'Firewall' tab is selected, and within it, the 'URL block' sub-tab is active. A checkbox labeled 'Enable URL Blocking' is present. Below it is a text input field for 'URL/keyword' with 'Add' and 'Reset' buttons. A table titled 'Current URL Blocking Table' has columns for 'NO.', 'URL/keyword', and 'Select'. At the bottom, there are buttons for 'Delete Selected', 'Delete All', 'Reset', 'Apply', and 'Cancel'. A language dropdown menu is located in the top right corner.

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Choose your language ▼

Status Wizard Wireless Settings **Firewall** Advanced Settings VPN Toolbox

Enable DMZ DoS Access **URL block**

You can block access to certain Web sites for a particular PC by entering either a full URL address or just a keyword of the Web site

☐ Enable URL Blocking

URL/keyword :

Add Reset

Current URL Blocking Table:

NO.	URL/keyword	Select
-----	-------------	--------

Delete Selected Delete All Reset Apply Cancel

Enable URL Blocking Enable/disable URL Blocking

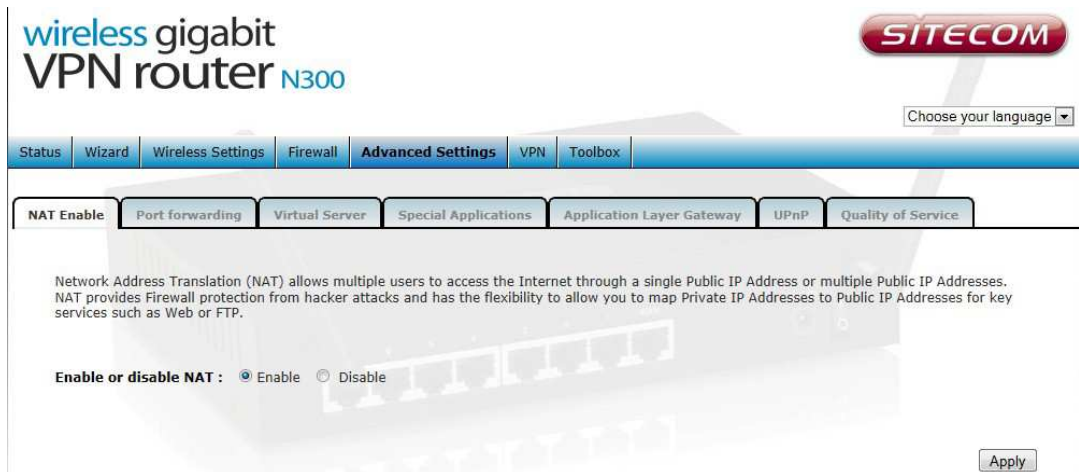
Add URL Keyword Fill in "URL/Keyword" and then click "Add". You can enter the full URL address or the keyword of the web site you want to block.

Remove URL Keyword If you want to remove some URL keywords from the "Current URL Blocking Table", select the URL keyword you want to remove in the table and then click "Delete Selected". If you want remove all URL keywords from the table, just click "Delete All" button. If you want to clear the selection and re-select again, just click "Reset".

Click **<Apply>** at the bottom of the screen to save the above configurations

14 Advanced Settings

Network Address Translation (NAT) allows multiple users at your local site to access the Internet through a single Public IP Address or multiple Public IP Addresses. NAT provides Firewall protection from hacker attacks and has the flexibility to allow you to map Private IP Addresses to Public IP Addresses for key services such as Websites and FTP. Select Disable to disable the NAT function.



The screenshot shows the web interface of a Sitecom wireless gigabit VPN router N300. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings (which is highlighted), VPN, and Toolbox. Below this, a sub-menu for Advanced Settings includes NAT Enable (highlighted), Port forwarding, Virtual Server, Special Applications, Application Layer Gateway, UPnP, and Quality of Service. The main content area explains that Network Address Translation (NAT) allows multiple users to access the Internet through a single Public IP Address or multiple Public IP Addresses, and provides Firewall protection. It then asks the user to "Enable or disable NAT" with two radio button options: "Enable" (which is selected) and "Disable". An "Apply" button is located at the bottom right of the form.

wireless gigabit
VPN router N300

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Status Wizard Wireless Settings Firewall **Advanced Settings** VPN Toolbox

NAT Enable Port forwarding Virtual Server Special Applications Application Layer Gateway UPnP Quality of Service

Network Address Translation (NAT) allows multiple users to access the Internet through a single Public IP Address or multiple Public IP Addresses. NAT provides Firewall protection from hacker attacks and has the flexibility to allow you to map Private IP Addresses to Public IP Addresses for key services such as Web or FTP.

Enable or disable NAT : ☒ Enable ☐ Disable

Apply

Port Forwarding

Port Forwarding allows you to re-direct a particular range of service port numbers (from the Internet/WAN Port) to a particular LAN IP address. It helps you to host servers behind the router NAT firewall.

The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes tabs for Status, Wizard, Wireless Settings, Firewall, Advanced Settings (selected), VPN, and Toolbox. Below this, a sub-menu shows options like NAT Enable, Port forwarding (selected), Virtual Server, Special Applications, Application Layer Gateway, UPnP, and Quality of Service. The main content area is titled 'Port forwarding' and contains a checkbox to 'Enable Port Forwarding'. Below this is a form with fields for 'Local IP', 'Type' (with a dropdown menu set to 'Both'), 'Port range', and 'Comment'. There are 'Add' and 'Reset' buttons. A section titled 'Current Port Forwarding Table:' contains a table with columns: NO., Local IP, Type, Port range, Comment, and Select. Below the table are buttons for 'Delete Selected', 'Delete All', 'Reset', 'Apply', and 'Cancel'.

Entries in this table allow you to automatically redirect common network services to a specific PC behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the local network.

☐ Enable Port Forwarding

Local IP	Type	Port range	Comment
	Both	-	

Current Port Forwarding Table:

NO.	Local IP	Type	Port range	Comment	Select
-----	----------	------	------------	---------	--------

Enable Port Forwarding Enable Port Forwarding

Private IP This is the private IP of the server behind the NAT firewall.

Type This is the protocol type to be forwarded. You can choose to forward "TCP" or "UDP" packets only, or select "both" to forward both "TCP" and "UDP" packets.

Port Range The range of ports to be forward to the private IP.

Comment description of this setting.

Add Port Forwarding Fill in the "Private IP", "Type", "Port Range" and "Comment" of the setting to be added and then click "Add". Then this Port Forwarding setting will be added into the "Current Port Forwarding Table" below.

Remove Port Forwarding If you want to remove a Port Forwarding setting from the "Current Port Forwarding Table", select the Port Forwarding setting that you want to remove in the table and then click "Delete Selected". If you want to remove all Port Forwarding settings from the table, just click "Delete All" button. Click "Reset" will clear your current selections.

Virtual Server

Use the Virtual Server function when you want different servers/clients in your LAN to handle different service/Internet application type (e.g. Email, FTP, Web server etc.) from the Internet. Computers use numbers called port numbers to recognize a particular service/Internet application type. The Virtual Server allows you to re-direct a particular service port number (from the Internet/WAN Port) to a particular LAN private IP address and its service port number.

The screenshot shows the web interface of a Sitecom wireless gigabit VPN router N300. The top navigation bar includes tabs for Status, Wizard, Wireless Settings, Firewall, Advanced Settings (selected), VPN, and Toolbox. Below this, a sub-navigation bar highlights Virtual Server among other options like NAT Enable, Port forwarding, Special Applications, Application Layer Gateway, UPnP, and Quality of Service. The main content area contains an explanatory text block, a checkbox to 'Enable Virtual Server', and a table for adding new virtual server entries. The table has columns for Local IP, Local Port, Type (with a dropdown menu set to 'Both'), Public Port, and Comment. Below the table are 'Add' and 'Reset' buttons. A section titled 'Current Virtual Server Table:' displays an empty table with columns for NO., Local IP, Local Port, Type, Public Port, Comment, and Select. At the bottom of this section are 'Delete Selected', 'Delete All', and 'Reset' buttons. The overall interface is blue and white with a light background image of the router.

wireless gigabit
VPN router N300

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Status Wizard Wireless Settings Firewall **Advanced Settings** VPN Toolbox

NAT Enable Port forwarding **Virtual Server** Special Applications Application Layer Gateway UPnP Quality of Service

You can configure the router as a Virtual Server allowing remote users to access services such as Web or FTP at your local PC. Depending on the requested service (TCP/UDP) port number, the router will redirect the external service request to the appropriate internal server (located at one of your local PCs).

☐ Enable Virtual Server

Local IP	Local Port	Type	Public Port	Comment
		Both ▼		

Add Reset

Current Virtual Server Table:

NO.	Local IP	Local Port	Type	Public Port	Comment	Select
-----	----------	------------	------	-------------	---------	--------

Delete Selected Delete All Reset Apply Cancel

Enable Virtual Server Enable Virtual Server.

Private IP This is the LAN client/host IP address that the Public Port number packet will be sent to.

Private Port This is the port number (of the above Private IP host) that the below **Public Port** number will be changed to when the packet enters your **LAN** (to the LAN Server/Client IP)

Type Select the port number protocol type (TCP, UDP or both). If you are unsure, then leave it to the default "both" setting. **Public Port** Enter the service (service/Internet application) port number from the Internet that will be re-directed to the above Private IP address host in your LAN

Comment The description of this setting.

Add Virtual Server Fill in the "Private IP", "Private Port", "Type", "Public Port" and "Comment" of the setting to be added and then click "Add". Then this Virtual Server setting will be added into the "Current Virtual Server Table" below.

Remove Virtual Server If you want to remove Virtual Server settings from the "Current Virtual Server Table", select the Virtual Server settings you want to remove in the table and then click "Delete Selected". If you want to remove all Virtual Server settings from the table, just click the "Delete All" button. Click "Reset" will clear your current selections.

Click <**Apply**> at the bottom of the screen to save the above configurations.

Special Applications

Some applications require multiple connections, such as Internet games, video Conferencing, Internet telephony and others. In this section you can configure the router to support multiple connections for these types of applications.

Enable Trigger Port Enable the Special Application function.

Trigger Port This is the out going (Outbound) range of port numbers for this particular application.

Trigger Type Select whether the outbound port protocol is "TCP", "UDP" or both.

Public Port Enter the In-coming (Inbound) port or port range for this type of application (e.g. 2300-2400, 47624)

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Status Wizard Wireless Settings Firewall **Advanced Settings** VPN Toolbox

NAT Enable Port forwarding Virtual Server **Special Applications** Application Layer Gateway UPnP Quality of Service

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications cannot work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the public ports associated with the trigger port to open them for inbound traffic.

☐ Enable Trigger Port

Trigger port	Trigger type	Public Port	Public type	Comment
	Both ▼		Both ▼	

Popular applications : Select an application ▼

Current Trigger-Port Table:

NO.	Trigger port	Trigger type	Public Port	Public type	Comment	Select
-----	--------------	--------------	-------------	-------------	---------	--------

Public Type Select the Inbound port protocol type: "TCP", "UDP" or both

Comment The description of this setting.

Popular applications This section lists the more popular applications that require multiple connections. Select an application from the Popular Applications selection. Once you have selected an application, select a location (1-10) in the Copy to selection box and then click the Copy to button. This will automatically list the Public Ports required for this popular application in the location (1-10) you specified.

Add Special Application Fill in the "Trigger Port", "Trigger Type", "Public Port", "Public Type", "Public Port" and "Comment" of the setting to be added and then click "Add". The Special Application setting will be added into the "Current Trigger-Port Table" below. If you happen to make a mistake, just click "Clear" and the fields will be cleared.

Remove If you want to remove Special Application settings from the "Current Trigger-Port Table", select the Special Application settings you want to remove in the table and then click "Delete Selected". If you want remove all Special Application settings from the table, just click the "Delete All" button. Click "Reset" will clear your current selections.

Application Layer Gateway

In the context of computer networking, an application-level gateway (also known as ALG or application layer gateway) consists of a security component that augments a firewall or NAT employed in a computer network. It allows customized NAT traversal filters to be plugged into the gateway to support address and port translation for certain application layer "control/data" protocols such as FTP, BitTorrent, SIP, RTSP, file transfer in IM applications etc. In order for these protocols to work through NAT or a firewall, either the application has to know about an address/port number combination that allows incoming packets, or the NAT has to monitor the control traffic and open up port mappings (firewall pinhole) dynamically as required. Legitimate application data can thus be passed through the security checks of the firewall or NAT that would have otherwise restricted the traffic for not meeting its limited filter criteria.

The screenshot shows a web-based configuration interface for a network device. At the top, there is a navigation bar with tabs: Status, Wizard, Wireless Settings, Firewall, **Advanced Settings**, VPN, and Toolbox. Below this, there is a sub-navigation bar with tabs: NAT Enable, Port forwarding, Virtual Server, Special Applications, **Application Layer Gateway**, UPnP, and Quality of Service. The main content area has a heading: "Some applications require special support to function under NAT. Please select the applications which you are using." Below the heading is a table with three columns: Enable, Name, and Select. The table lists various applications with checkboxes in the 'Enable' column and descriptions in the 'Select' column. At the bottom right of the table are 'Apply' and 'Cancel' buttons.

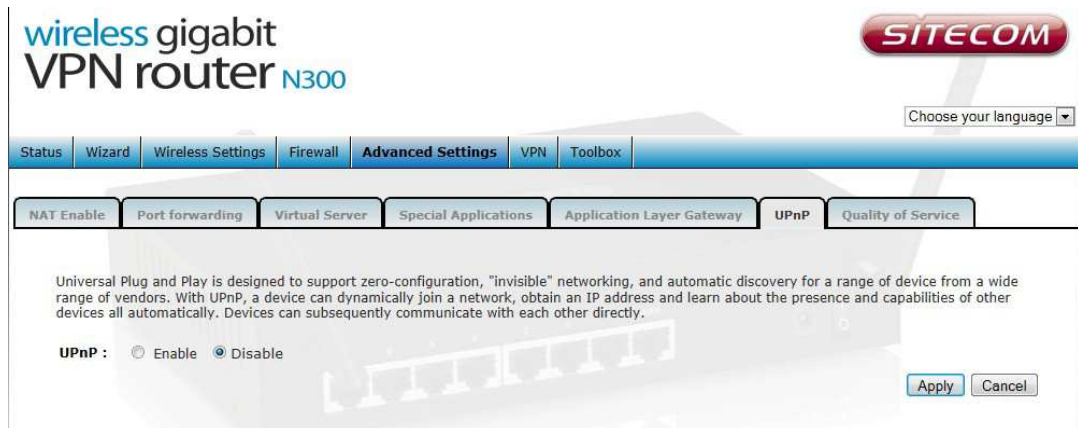
Enable	Name	Select
☐	H323	Support for H323/netmeeting.
☐	MMS	Support for Microsoft Streaming Media Services protocol.
☐	TFTP	Support for TFTP.
☐	Egg	Support for eggdrop bot networks.
☐	IRC	Allows DCC to work though NAT and connection tracking.
☐	Amanda	Support for Amanda backup tool protocol.
☐	Quake3	Support for Quake III Arena connection tracking and nat.
☐	Talk	Allows netfilter to track talk connections.
☐	IPsec	Support for IPsec passthrough
☐	FTP	Support for FTP.

Apply Cancel

To **Enable/Disable** special support for any of the applications in the list. You can Simply check or uncheck the corresponding checkbox and Click "Apply" for the settings to take effect.

UPnP

With UPnP, all PCs in your Intranet will discover this router automatically, so you don't have to configure your PC and it can easily access the Internet through this router.



UPnP Feature You can enable or Disable the UPnP feature here. After you enable the UPnP feature, all client systems that support UPnP, like Windows XP, can discover this router automatically and access the Internet through this router without having to configure anything. The NAT Traversal function provided by UPnP can let applications that support UPnP connect to the internet without having to configure the virtual server sections.

QoS

QoS can let you classify Internet application traffic by source/destination IP address and port number. You can assign priority for each type of application and reserve bandwidth for it. The packets of applications with higher priority will always go first. Lower priority applications will get bandwidth after higher priority applications get enough bandwidth. This can let you have a better experience in using critical real time services like Internet phone, video conference ...etc. All the applications not specified by you are classified as rule name "Others". The rule with a smaller priority number has a higher priority; the rule with a larger priority number has a lower priority. You can adjust the priority of the rules by moving them up or down.

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VPN router N300

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Status Wizard Wireless Settings Firewall **Advanced Settings** VPN Toolbox

NAT Enable Port forwarding Virtual Server Special Applications Application Layer Gateway UPnP **Quality of Service**

Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled jitter and latency (required by some real-time and interactive traffic), and improved loss characteristics. Also important is making sure that providing priority for one or more flows does not make other flows fail.

☒ QoS Enable

Current QoS Table :

Priority	Rule Name	Upload Bandwidth	Download Bandwidth	Select
----------	-----------	------------------	--------------------	--------

Enable/Disable QoS You can check "Enable QoS" to enable QoS functionality for the WAN port.

Add a QoS rule into the table Click "Add" then enter a form of the QoS rule. Click "Apply" after filling out the form the rule will be added into the table.

Remove QoS rules from the table If you want to remove QoS rules from the table, select the QoS rules you want to remove in the table and then click "Delete Selected". If you want remove all QoS rules from the table, just click the "Delete All" button. Clicking "Reset" will clear your current selections.

Edit a QoS rule Select the rule you want to edit and click "Edit", then enter the detail form of the QoS rule. Click "**Apply**" after editing the form and the rule will be saved.

Adjust QoS rule priority You can select the rule and click "Move Up" to make its priority higher. You also can select the rule and click "Move Down" to make its priority lower.

15 VPN

A Virtual Private Network (VPN) provides a secure connection between two or more computers or protected networks over the public Internet. It provides authentication to ensure that the information is going to and from the correct parties and security to protect the information from viewing or tampering en route. The WLR-4002B supports IPSec (Site to Site, Remote to Site) and L2TP over IPSec methods to establish VPN connections and the maximum VPN session number is up to 5.

Status

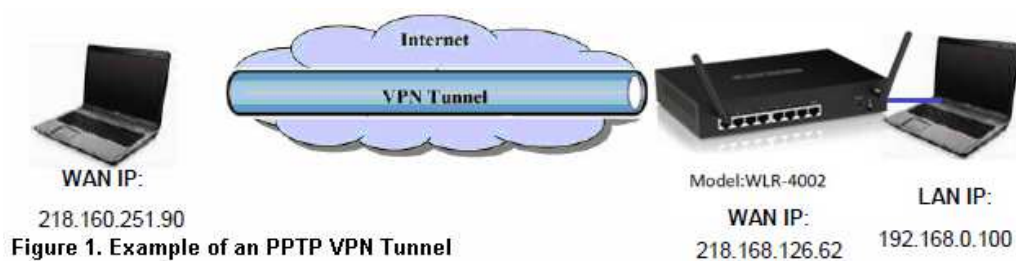
This page displays the connect status of VPN connection. You can select one of them to connect or disconnect the VPN connection.



To **Connect** or **Disconnect** an existing tunnel. Select the tunnel from the list by ticking the corresponding check box and click connect or disconnect.

Note : If the connection type is remote dial-in (Client to Site or L2TP over IPSec), you can't disconnect this session manually.

Using the Wizard to Configure the WLR-4002B for a PPTP VPN tunnel.



1. In the Top Menu on the right side, click **VPN**.
2. In the submenu, click **Wizard** to add a VPN profile.
3. Click **Next** to create a VPN profile.



4. In the **Name** field, enter a name for the PPTP VPN tunnel. This name is for reference purposes. Click **Next** to continue.

Step1: VPN Policy Name

Please enter the policy name

Name: (eg: OfficeVPN)

5. Click **PPTP** and click **NEXT** to continue.

The screenshot shows the 'Step2: VPN Connection Type' configuration screen. At the top, there are four tabs: 'Status', 'Wizard', 'Profile Setting', and 'User Setting'. Below the tabs, the title 'Step2: VPN Connection Type' is followed by the instruction 'Please choose VPN connection type'. There are four radio button options: 'IPSec' (Choose this if you are using other 3rd party VPN client software, or gateway), 'L2TP over IPSec' (Choose this if you are using Windows VPN client for connection), 'L2TP' (Choose this if you are using L2TP client for connection), and 'PPTP' (Choose this if you are using PPTP client for connection). The 'PPTP' option is selected. At the bottom right, there are three buttons: 'Previous', 'Next', and 'Cancel'.

6. Complete the following fields :

User Name
Password
Server IP

Enter a name for authentication.

Enter a password for authentication.

Enter any private IP address on a different subnet than the LAN IP address of the computer connected behind the WLR-4002B. (When WLR4002 is on default settings, the LAN IP address is 192.168.0.100. In this case you can select any private IP address other than 192.168.0.x, for example 192.168.3.x).

Remote IP Range

Enter an IP range that is on the same subnet as the Server IP address you have entered in the Server IP address field, but the range should not include Server IP. (For example if you specified a Server IP address of 192.168.2.1, you can define a Remote IP Range of 192.168.2.100 - 200.)

Click **Next** to continue.

The screenshot shows the 'Step4: VPN PPTP Setting' configuration screen. At the top, there are four tabs: 'Status', 'Wizard', 'Profile Setting', and 'User Setting'. Below the tabs, the title 'Step4: VPN PPTP Setting' is followed by the instruction 'Please enter the setting of PPTP'. There are two main sections: 'PPTP setting' and 'VPN Server IP Setting'. The 'PPTP setting' section has four fields: 'Authentication Mode' (dropdown menu with 'MSCHAP_V2' selected), 'Encryption' (dropdown menu with '128-bit' selected), 'Name' (text input field with '(eg: guest)' as a hint), and 'Password' (text input field with '(eg: nk9543)' as a hint). The 'VPN Server IP Setting' section has two fields: 'IP address' (text input field with '(eg: 10.0.174.45)' as a hint) and 'Remote IP Range' (text input field with a hyphen separator and '(eg: 10.0.174.66 -100)' as a hint). At the bottom right, there are three buttons: 'Previous', 'Next', and 'Cancel'.

8. Enable the VPN policy, and then click **Apply** to save the VPN profile.

Status

Wizard

Profile Setting

User Setting

Setup Successfully

☒ Enable this policy immediately.

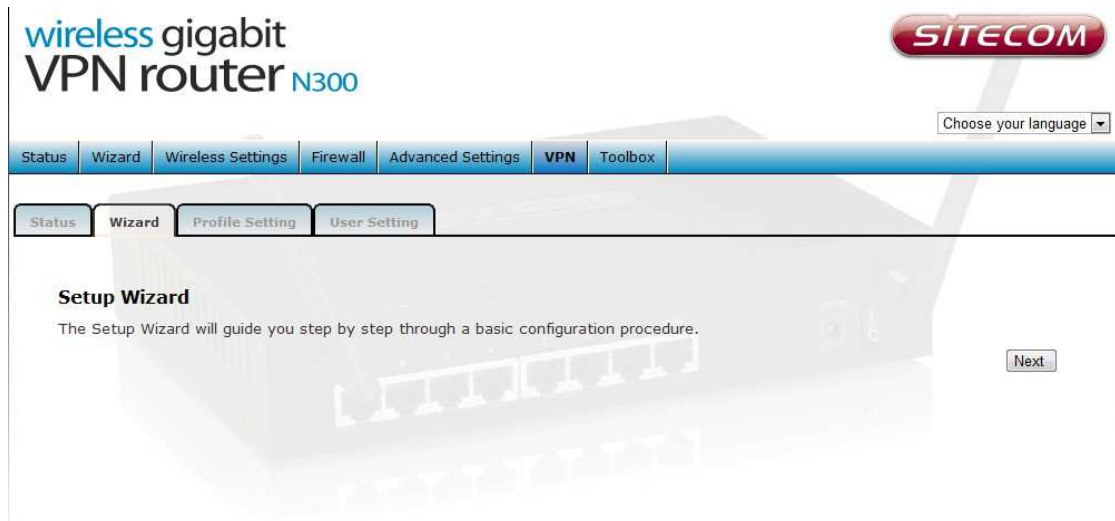
Previous

Apply

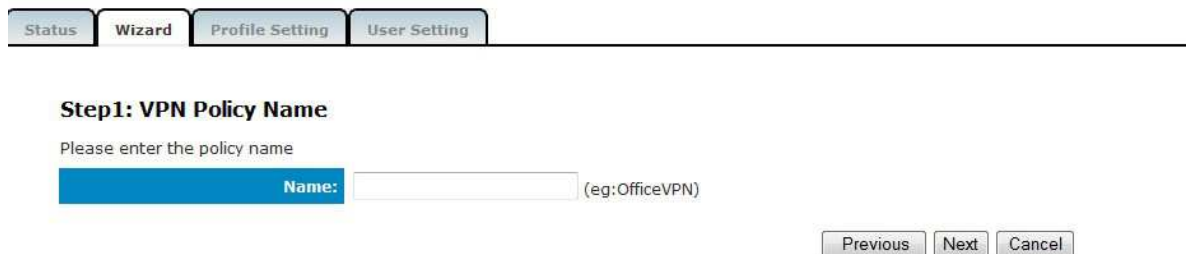
Cancel

Using the Wizard to Configure the WLR-4002B for L2TP over IPsec VPN tunnel.

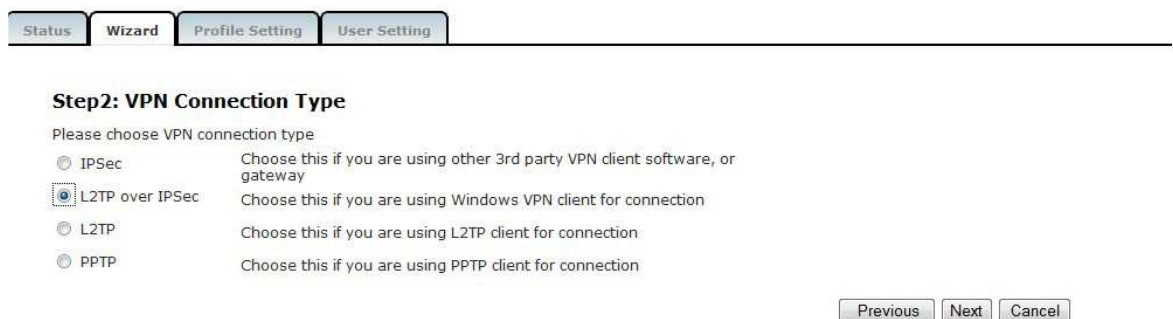
1. In the Top Menu on the right side, click **VPN**.
2. In the submenu, click **Wizard** to add a VPN profile.
3. Click **Next** to create a VPN profile.



4. In the **Name** field, enter a name for the L2TP VPN tunnel. This name is for reference purposes. Click **Next** to continue.



5. Click **L2TP** and click **NEXT** to continue.



6. Complete the following fields:

User Name	Enter a name for authentication.
Password	Enter a password for authentication.
Server IP	Enter any IP address on a different subnet than the LAN IP address of the computer connected behind the WLR-4002B.(When WLR4002 is on default settings, the LAN IP address is 192.168.0.100. In this case you can select any IP address other than 192.168.0.x).
Remote IP Range	Enter an IP range that is on the same subnet as the Server IP address you have entered in the Server IP address field, but the range should not include Server IP.(For example if you specified a Server IP address of 192.168.2.1, you can define a Remote IP Range of 192.168.2.100 – 200.)

Click **Next** to continue.

Step4: VPN L2TP Setting
Please enter the setting of L2TP

L2TP Setting

Authentication Mode: MSCHAP_V2

Name: (eg: guest)

password: (eg: nk9543)

VPN Server IP Setting

IP address: (eg: 10.0.174.45)

Remote IP Range: - (eg: 10.0.174.66 -100)

Previous Next Cancel

7. In the **Shared Key** field, enter the Security key you wish to use.

Step5: Shared Key
Please enter the shared key for the VPN

SA: ESP-3DES-SHA1

Shared Key: (eg:apple123)

Previous Next Cancel

8. **Enable the VPN policy**, and then click **Apply** to save the VPN profile.

Status

Wizard

Profile Setting

User Setting

Setup Successfully

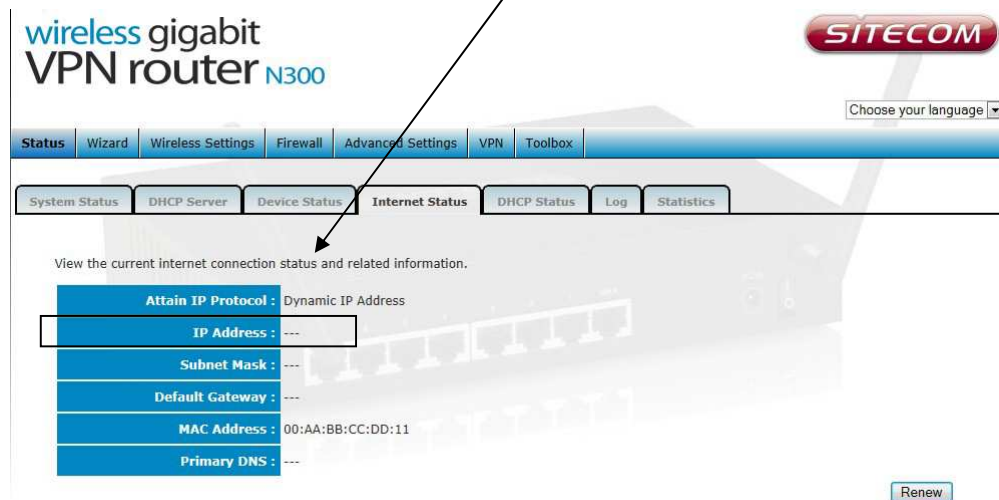
☒ Enable this policy immediately.

Previous

Apply

Cancel

In the following examples it is assumed that the WLR-4002B is placed behind a bridged modem. This means that the Router will receive a public IP address on the WAN side. The **WAN/Internet IP address** can be found on the Internet status page of the WLR-4002B.

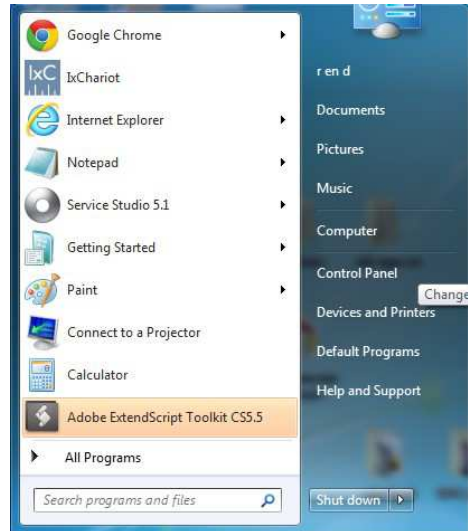


If the WAN IP address of the WLR-4002B is not a public IP address but a local IP address (for example any IP address in the following ranges: 10.X.X.X, 172.16.X.X or 192.168.X.X)

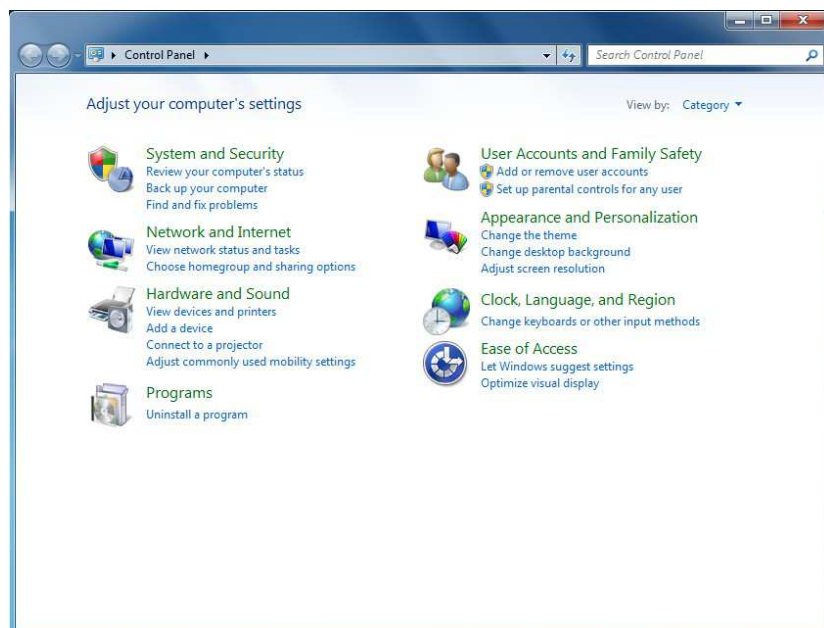
In this situation your WLR-4002B is placed behind a NAT enabled modem. In this case consult your manual to make sure your modem supports VPN pass through and the GRE47 protocol and set it up to allow access to the VPN server behind the modem.

Configuring a Microsoft Windows 7 VPN Client

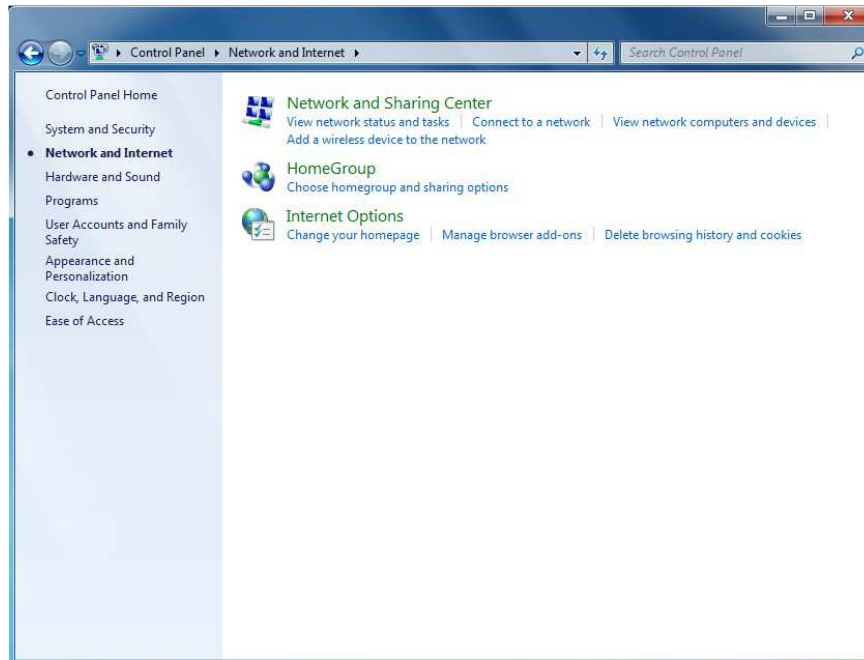
1. Click the **Start** button and open the **Control Panel**.



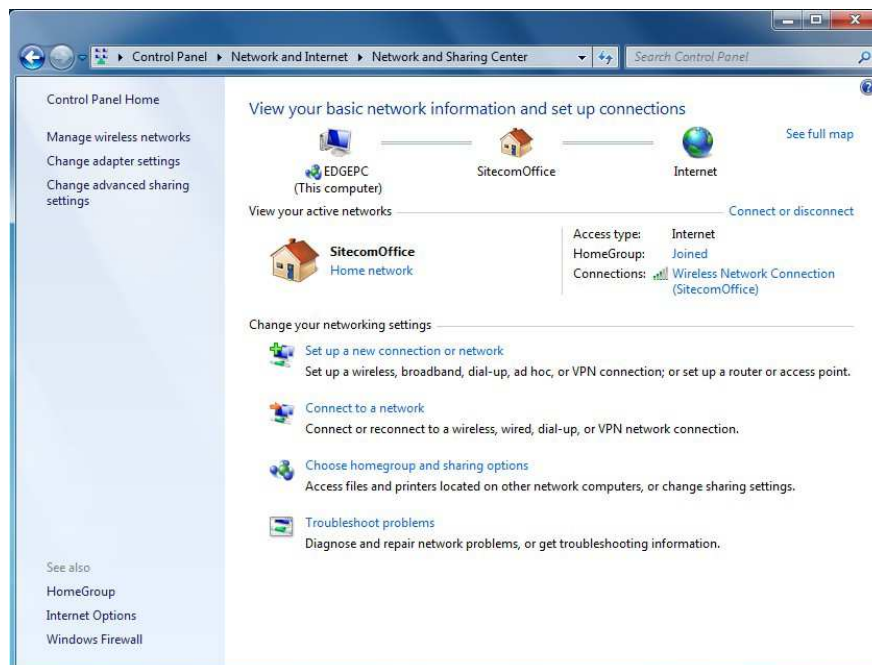
2. From the **Control Panel**, select **Network and Internet**. (If your control panel view has been set to Icons you can directly go to step 4)



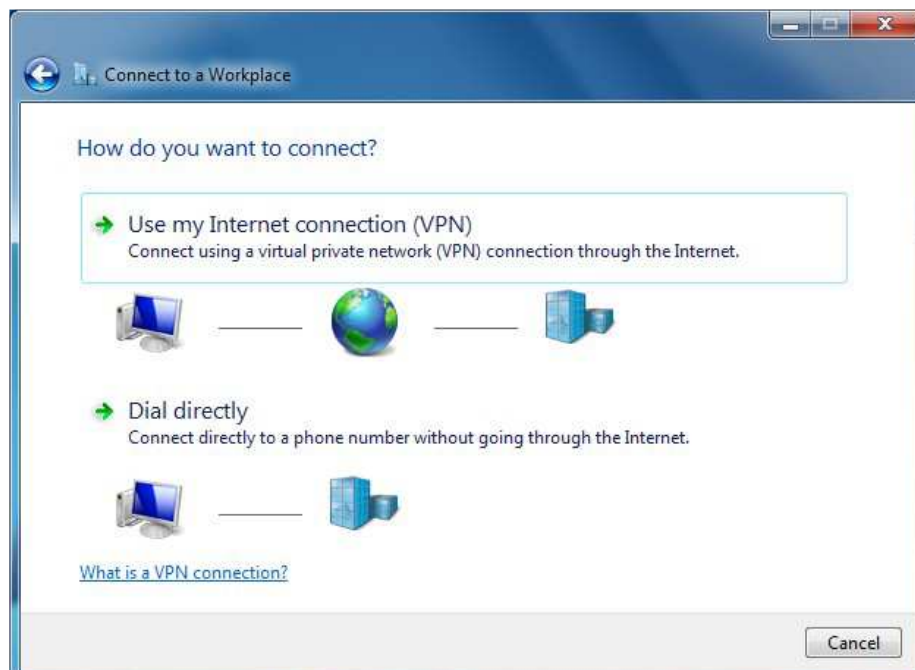
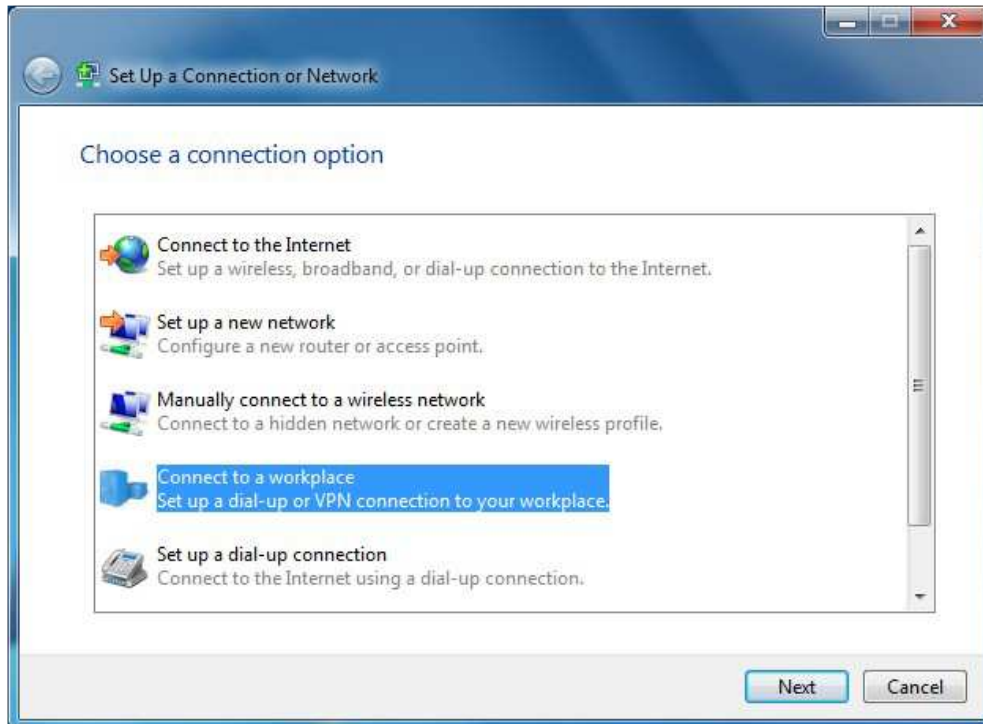
3. From **Network and internet**, select **Network and Sharing center** .



4. Under **Network and Sharing Center**, select **Setup a new connection or network**.



5. Click **Connect to a workplace**, and click **Use my internet connection (VPN)**.



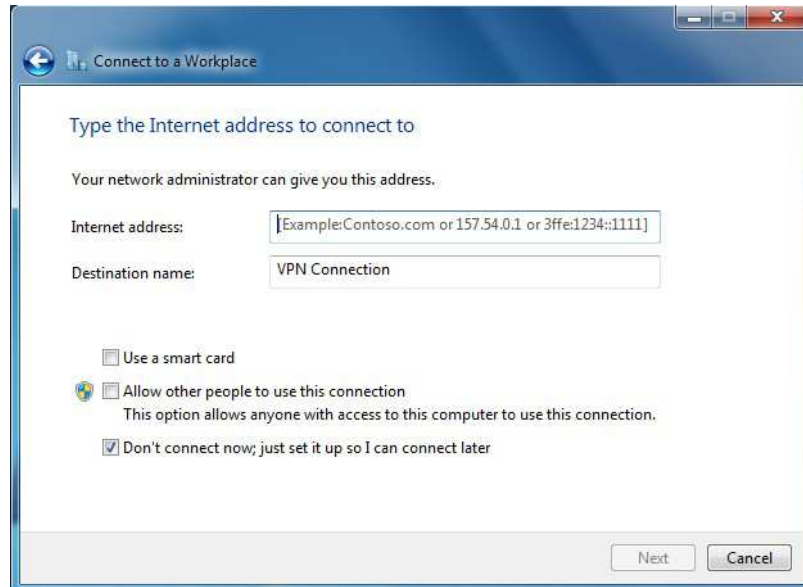
6. Complete the following fields:

Internet Address Enter the WLR-4002B WAN IP address.

Destination name Enter a name for the VPN client.

We recommend to select: Don't connect now. Just set it up so I can connect later.

Click **next** to continue.



7. Complete the following fields:

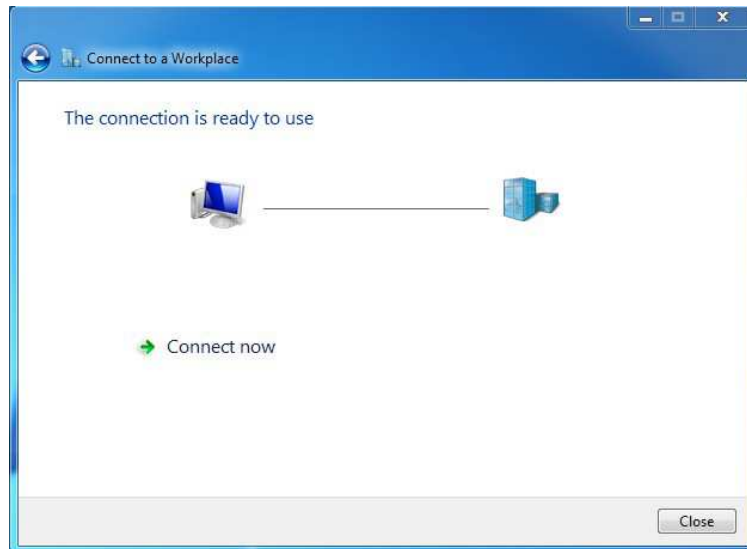
User name Enter the username used to log onto the VPN tunnel.

Password Enter the password used to log onto the VPN tunnel.

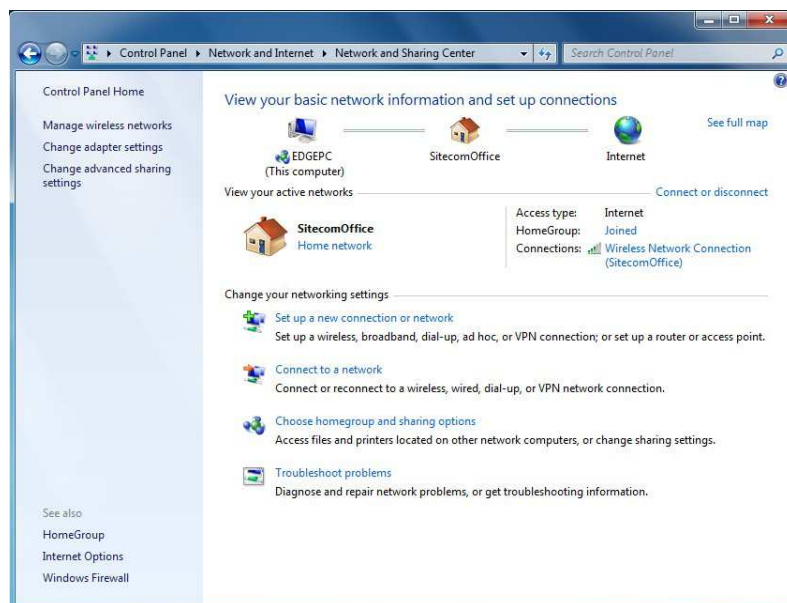
Click **Create** to continue.



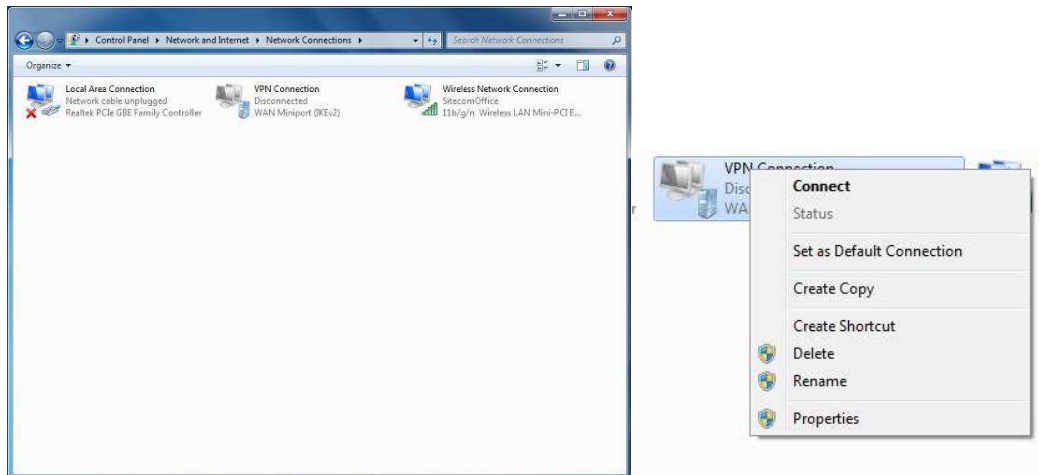
8. When the following screen appears, click the **Close** button to close the VPN connection setting.



9. Select **Change adapter settings** on the left side of the window.



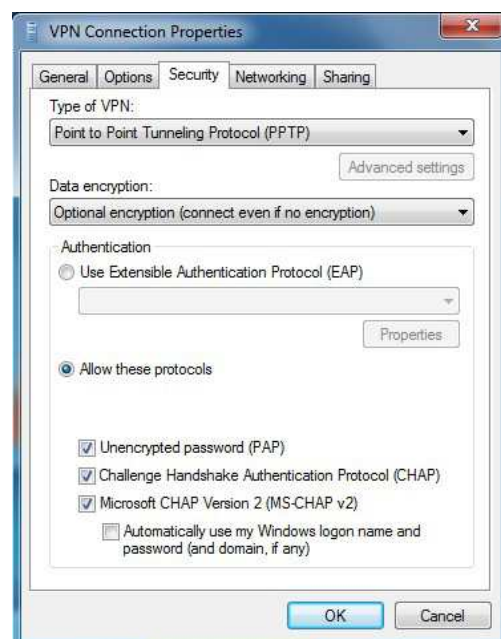
10. Select the VPN connection you just set, right-click VPN Connection, and select **Properties**.



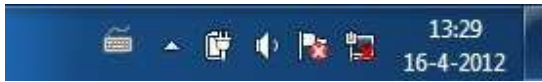
11. Go to the Security tab and configure the following settings :

Under the **Type of VPN**, select the Protocol that has been set in the WLR-4002B, **Point to point tunneling protocol(PPTP)** or **Layer 2 Tunneling Protocol with IPsec (L2TP-IPsec)** .

Check **unencrypted password (PAP)**.
Check **Challenge Handshake Authentication Protocol (PPTP)**.
Check **Microsoft CHAP Version 2 (MS-CHAP v2)**.



12. Go to **Network and Sharing Center** on the bottom-right of the windows.



Under VPN Connection click **Connect**.

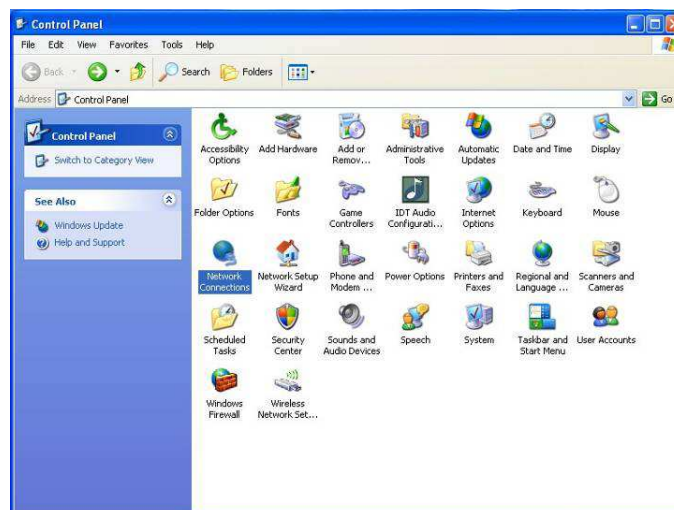


Configuring a Microsoft Windows XP VPN Client

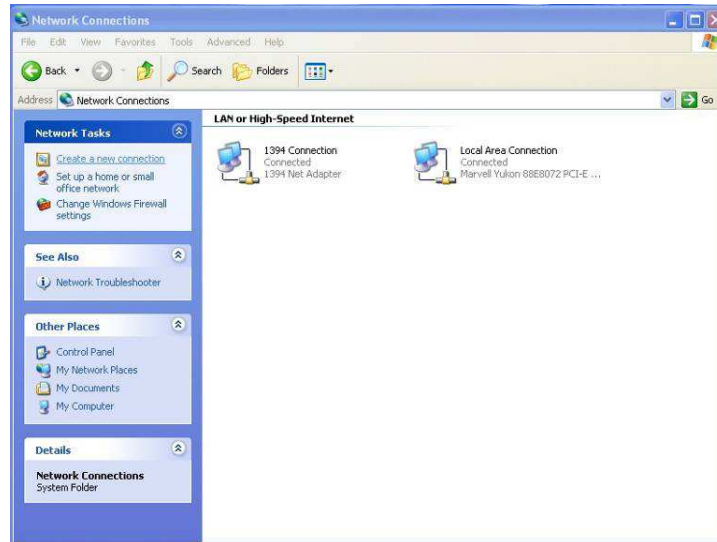
1. Click the **Start** button and open the **Control Panel**.



2. From the **Control Panel**, Click on **Network Connections**.



3. Click on **Create a network** from the left side of the window.



4. Click **Next** to continue to setup the VPN client.



5. Select **Connect to the network at my workplace** and click Next to continue.



6. Select **Virtual Private network connection** and click **Next** to continue.

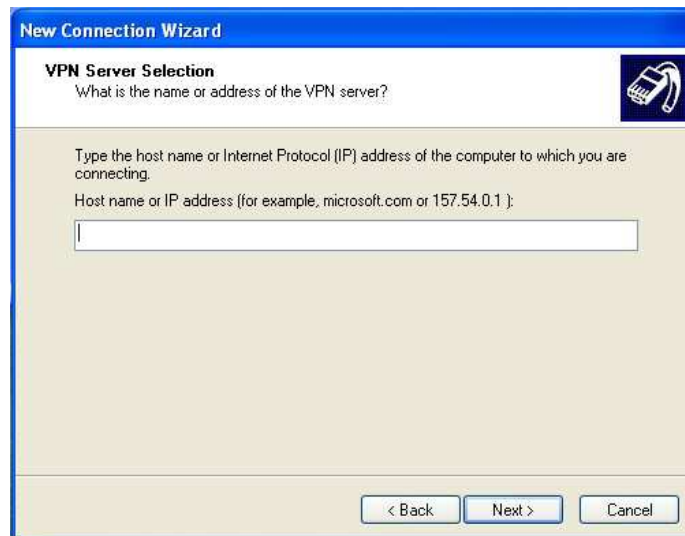


7. Enter a **Company name**, this name is only for reference purposes.



The screenshot shows the 'New Connection Wizard' window with the 'Connection Name' step. The title bar is blue with the text 'New Connection Wizard'. Below the title bar, the section is titled 'Connection Name' with a subtitle 'Specify a name for this connection to your workplace.' and a small icon of a computer and a plug. The main area is light beige and contains the text 'Type a name for this connection in the following box.' followed by 'Company Name' and a text input field. Below the input field, it says 'For example, you could type the name of your workplace or the name of a server you will connect to.' At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

8. Enter the **Hostname**, this should be the WLR-4002B WAN IP address and click **Next** to continue.



The screenshot shows the 'New Connection Wizard' window with the 'VPN Server Selection' step. The title bar is blue with the text 'New Connection Wizard'. Below the title bar, the section is titled 'VPN Server Selection' with a subtitle 'What is the name or address of the VPN server?' and a small icon of a computer and a plug. The main area is light beige and contains the text 'Type the host name or Internet Protocol (IP) address of the computer to which you are connecting.' followed by 'Host name or IP address (for example, microsoft.com or 157.54.0.1):' and a text input field. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

9. Click **Finish** to continue, you may choose to add a shortcut for this connection on the Desktop by clicking the checkbox before you click **Finish**.



10. Click on **Properties**.



11. Click on the **Security** Tab from the top in the window and select **Advanced**, click **Settings** to continue.



12. Configure the following settings:

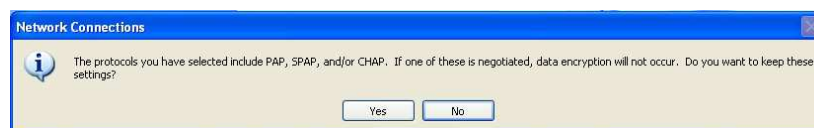
Under **Data encryption**, select Optional encryption (connect even if no encryption)

Check	Unencrypted password (PAP)
Check	Challenge Handshake Authentication Protocol (SPAP)
Uncheck	Microsoft CHAP (MS-CHAP)
Check	Microsoft CHAP Version 2 (MS-CHAP v2)

Click **OK** to continue.

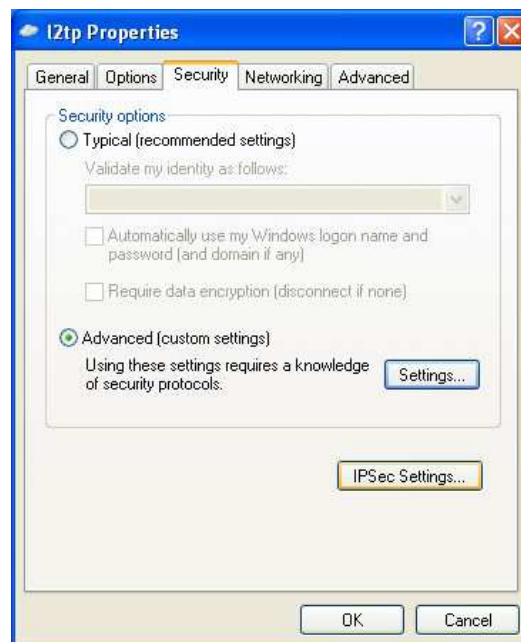


13. Click **Yes** to continue. If the VPN type you have configured in the WLR-4002B is PPTP you can skip step 14.



- 14a. If the VPN Type of the tunnel you have set up in the WLR-4002B is L2TP over IPSec You have also entered a **Shared key** in the WLR-4002B(see step 7 of chapter **Using the Wizard to Configure the WLR-4002B for L2TP over IPSec** for reference).

Click on **IPSec Settings...**



- 14b. Check Use pre-shared key for authentication.
Key, Enter the shared key you have entered in the WLR-4002B.



Configuring a MacOS VPN Client

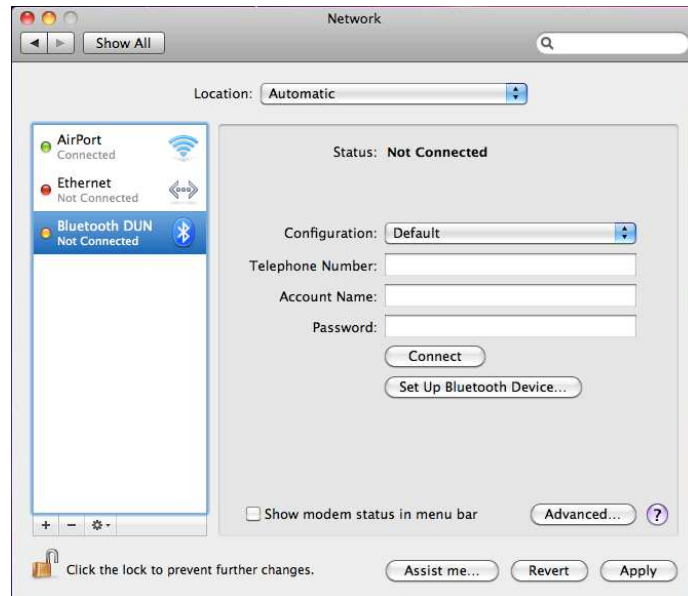
1. Select **System Preferences**.



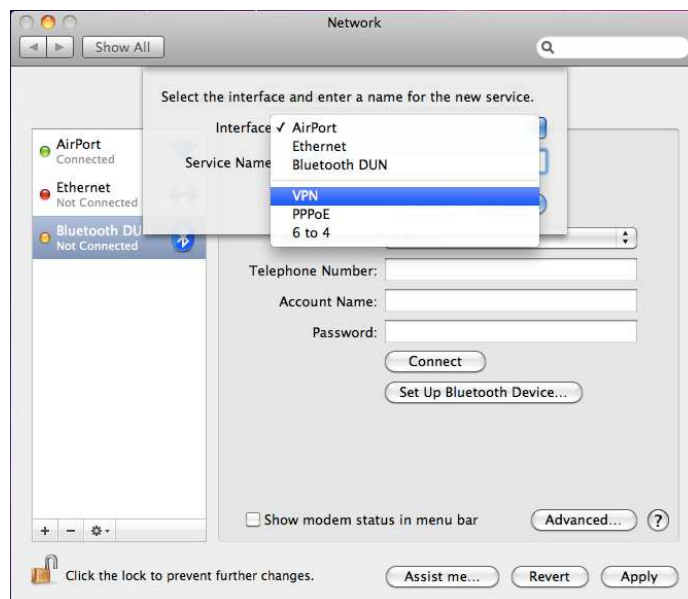
2. On the **System preferences** panel, Click **Network**.



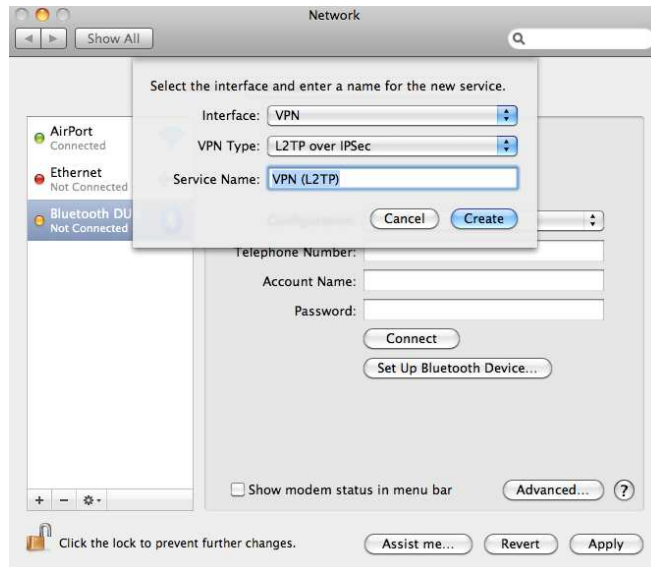
3. Click on the **+** sign on the bottom left.



4. Select the **VPN** interface.



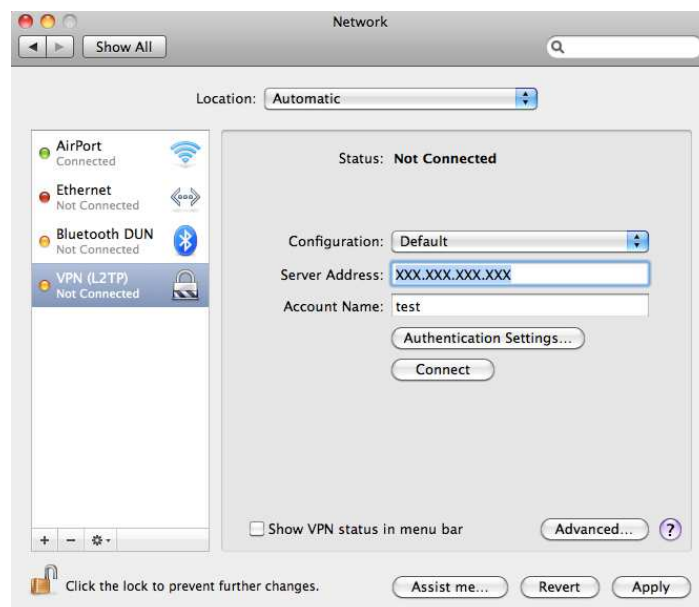
5. Under the **VPN Type** dropdown, select the option that corresponds to the **VPN Type** you have configured in the WLR-4002B. Enter a name for this profile (this name is for reference purpose only)



6. Complete the following fields:

Server address Enter the WAN IP address of the WLR-4002B.
Account Name Enter the name used to log onto the VPN tunnel (this must be one of the users you have set in the VPN user table of the WLR-4002B)

Click **Authentication Settings** to continue.

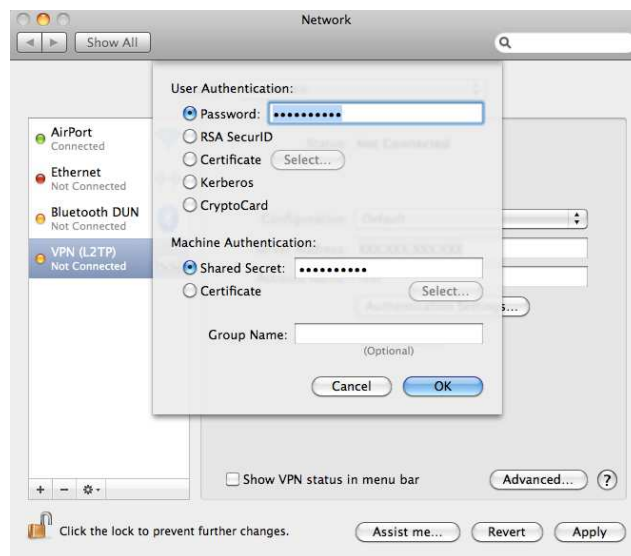


7. Complete the following fields:

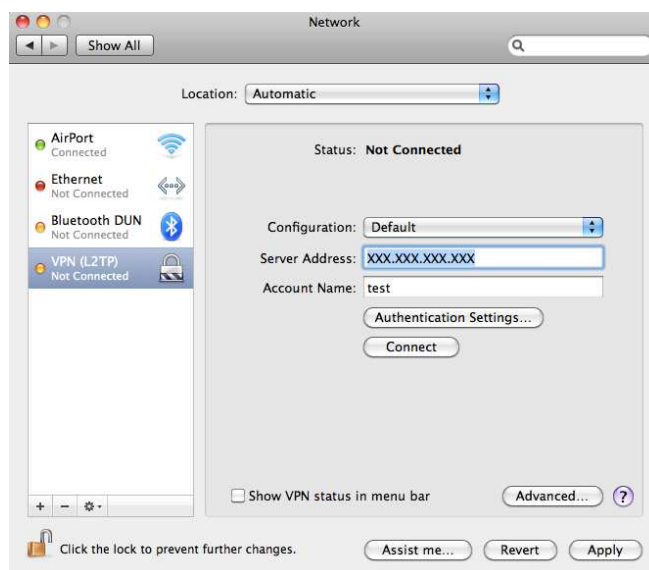
Password Enter the password that belongs to the Account name which you have entered in step 6 of this Guide.

Shared Key If the VPN Type of the VPN tunnel you have set up in the WLR-4002B is L2TP over IPsec You have also entered a **Shared key** in the WLR-4002B(see step 7 of chapter **Using the Wizard to Configure the WLR-4002B for L2TP over IPsec** for reference) Enter the same key in this field.

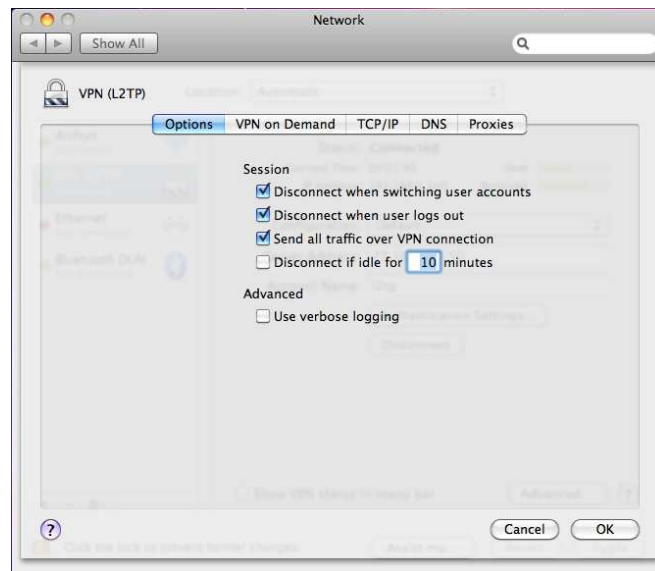
Click **OK** to continue.



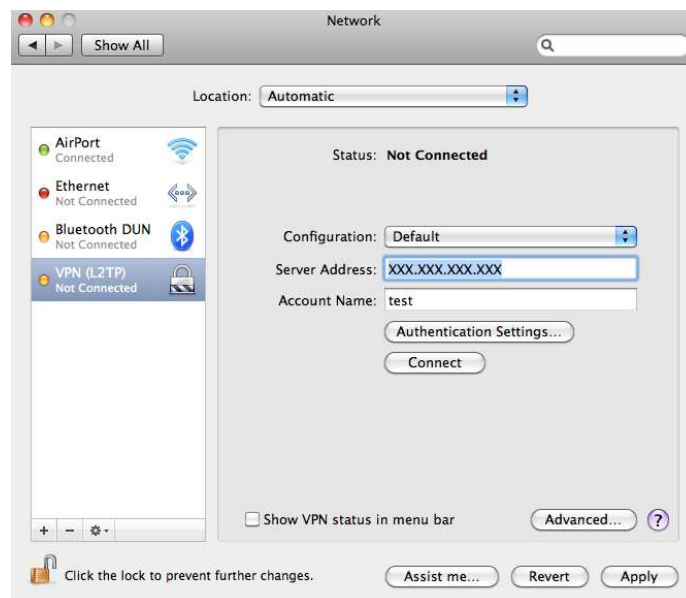
8. Click on **Advanced** in the network panel to continue.



9. Select the checkbox **Send all traffic over VPN connection**. Click **OK** to continue.



10. If the VPN tunnel is already connected, click **Disconnect** and **Connect** again for the changes made in step 9 to take effect.

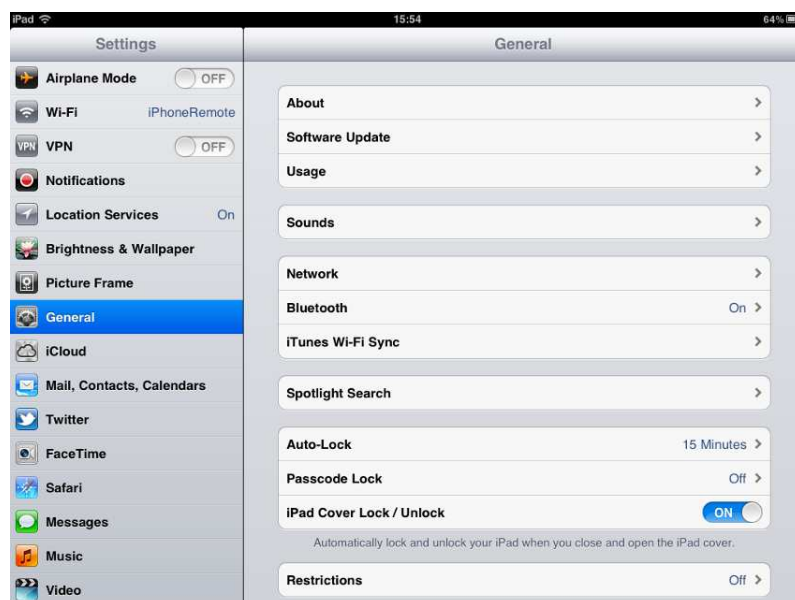


Configuring a VPN client on iOS

1. Click **Settings** on the Springboard.



2. Select **General** on from the panel of the left side and Click on **Network**.



3. Click on **VPN**.



4. click on **Add VPN Configuration...**



3. Select the **VPN Type** that corresponds to the **VPN Type** you have configured in the WLR-4002B.

Complete the following fields:

Description	Enter a name for your VPN connection, this name is for reference purposes only.
Server	Enter the WLR-4002B WAN IP address
Account	Enter the name used to log onto the VPN tunnel (this must be one of the users you have set in the VPN user table of the WLR-4002B)
Password	Enter the Password used to log onto the VPN tunnel.

Secret(L2TP only) If the VPN Type of the VPN tunnel you have set up in the WLR-4002B is L2TP over IPSec You have also entered a **Shared key** in the WLR-4002B (see step 7 of chapter **Using the Wizard to Configure the WLR-4002B for L2TP over IPSec** for reference) Enter the same key in this field.

The image displays two side-by-side screenshots of the 'Add Configuration' dialog box, which is used for setting up a VPN connection. Both screenshots show the 'Add Configuration' title bar with 'Cancel' and 'Save' buttons. The left screenshot has the 'PPTP' tab selected, while the right screenshot has the 'L2TP' tab selected. Both tabs show a list of configuration fields: 'Description' (Required), 'Server' (Required), 'Account' (Required), 'RSA SecurID' (toggle set to OFF), 'Password' (Ask Every Time), 'Encryption Level' (Auto with a dropdown arrow), 'Send All Traffic' (toggle set to ON), and 'Proxy' (Off, Manual, Auto buttons). The right screenshot (L2TP tab) includes an additional 'Secret' field below the 'Password' field.

4. Set the Switch to **ON** to connect to the VPN Network.

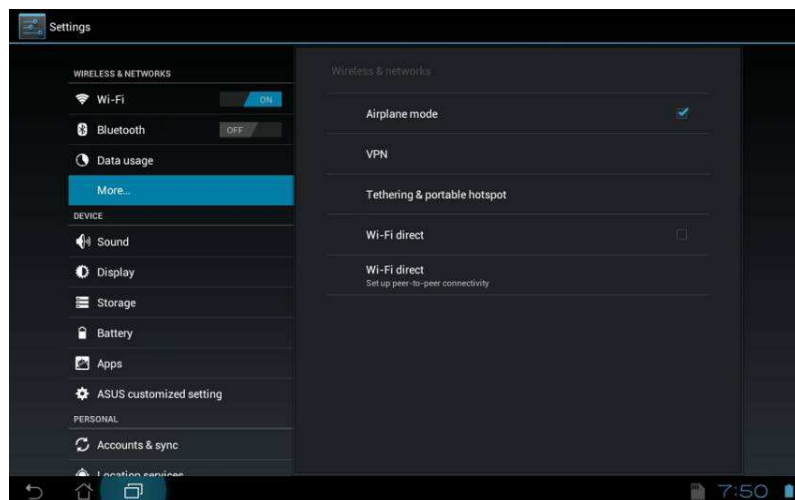


Configuring a VPN client on Android

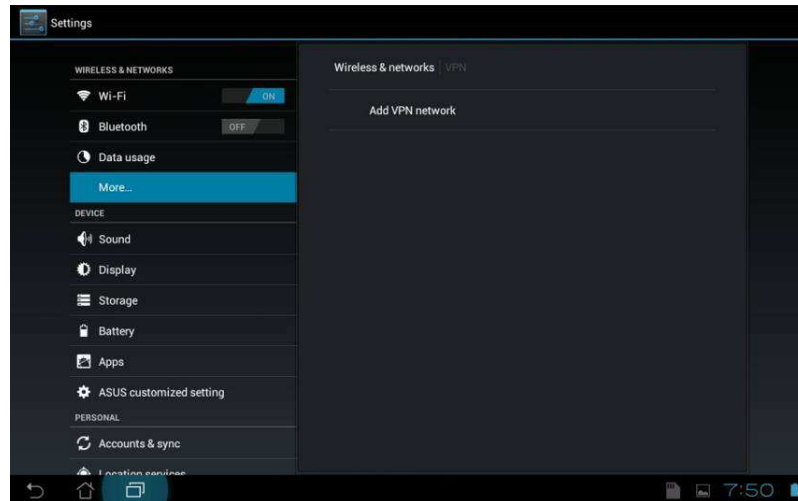
1. Click on **Settings**.



2. click on **More..** from the Settings menu on the upper left. Then Click on **VPN**.



2. Click on **Add VPN Network**.



3. Select the **VPN Type** that corresponds to the **VPN Type** you have configured in the WLR-4002B.

Complete the following fields:

Description	Enter a name for your VPN connection, this name is for reference purposes only.
Server Account	Enter the WLR-4002B WAN IP address Enter the name used to log onto the VPN tunnel (this must be one of the users you have set in the VPN user table of the WLR-4002B)
Password	Enter the Password used to log onto the VPN tunnel.
Secret(L2TP only)	If the VPN Type of the VPN tunnel you have set up in the WLR-4002B is L2TP over IPSec You have also entered a Shared key in the WLR-4002B(see step 7 of chapter Using the Wizard to Configure the WLR-4002B for L2TP over IPSec for reference) Enter the same key in this field.

Edit VPN network

Name

Type

Server address

☒ PPP encryption (MPPE)

☐ Show advanced options

Cancel Save

Edit VPN network

Name

Type

Server address

L2TP secret

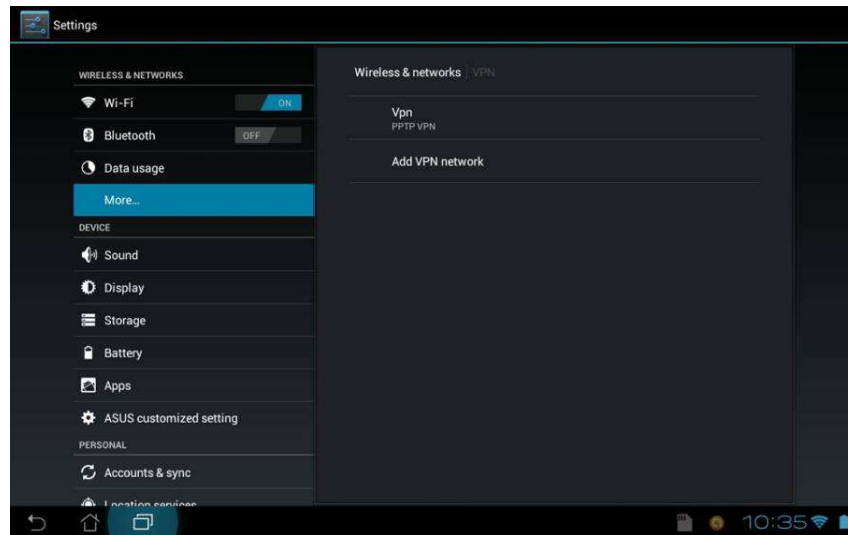
IPSec identifier

IPSec pre-shared key

☐ Show advanced options

Cancel Save

4. Click on the VPN network you have just created to connect.



Profile Setting

This page allows you to Add, Edit and Delete VPN profiles.

The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN (which is highlighted), and Toolbox. Below this, there's a sub-navigation bar with Status, Wizard, Profile Setting (highlighted), and User Setting. The main content area features a table with columns: NO., Enable, Name, Type, Local Address, Remote Address, Crypto-suite, Gateway, and Select. Below the table are buttons for Add, Edit, Delete Selected, and Delete All. At the bottom right, there are Apply and Cancel buttons. The Sitecom logo is visible in the top right corner, and a language selection dropdown is located next to it.

NO.	Enable	Name	Type	Local Address	Remote Address	Crypto-suite	Gateway	Select
Add Edit Delete Selected Delete All								

Add click here if you wish to manually add a new VPN profile.

Edit to edit an existing profile, select one from the list by selecting the corresponding radio button and click 'Edit'.

Click "**Apply**" to save the settings and apply the changes.

Add Users to an existing Profile

Click on **Profile Setting**.

The screenshot shows the Sitecom N300 VPN router web interface. The top navigation bar includes Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. The 'VPN' tab is selected. Below this, the 'Profile Setting' sub-tab is active. A table lists existing profiles with columns: NO., Enable, Name, Type, Local Address, Remote Address, Crypto-suite, Gateway, and Select. Below the table are buttons for Add, Edit, Delete Selected, and Delete All. At the bottom right are Apply and Cancel buttons.

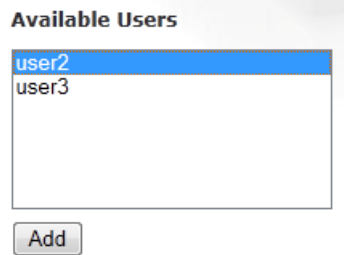
Select the **Profile** for which you wish to modify user settings and click on **Edit**.

Then Click on the protocol name you selected to edit.

The screenshot shows the 'User Setting' sub-tab for a selected profile. It has three tabs: General, L2TP, and Network. The 'L2TP' tab is selected, indicated by an arrow. Under 'L2TP Setting', the 'Authentication' dropdown is set to 'MSCHAP_V2'. There are two lists: 'Available Users' containing 'user2' and 'user3', and 'Member' containing 'user1'. Between the lists are '>>' and '<<' buttons. An 'Add' button is at the bottom left of the 'Available Users' list. 'Apply' and 'Cancel' buttons are at the bottom right.

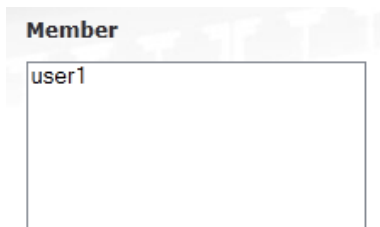
From here all current users that you have created will be shown.

In the **Available** box existing users are displayed that do not have access to this VPN Tunnel yet.



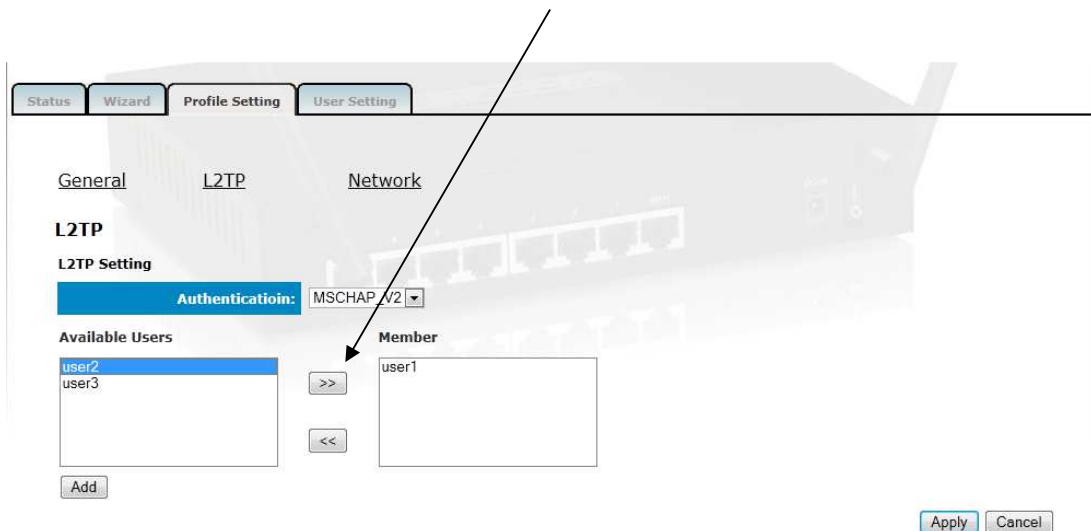
A dialog box titled "Available Users" with a list containing "user2" (highlighted) and "user3". Below the list is an "Add" button.

The **Member** box displays users that already have access to this VPN Tunnel.



A dialog box titled "Member" with a list containing "user1".

To Add or remove users to the VPN Tunnel, click the on the username you wish you Add or Remove and press the '<<', '>>' buttons to the desired box.



A screenshot of a VPN Tunnel configuration window. The "User Setting" tab is selected. Under "L2TP Setting", the "Authentication" dropdown is set to "MSCHAP v2". Below this are two boxes: "Available Users" (containing "user2" and "user3") and "Member" (containing "user1"). Between the boxes are ">>" and "<<" buttons. An arrow points from the text above to the ">>" button. At the bottom right are "Apply" and "Cancel" buttons.

Click Apply Click "**Apply**" to save the settings and apply the changes.

PPTP

The Point-to-Point Tunneling Protocol (PPTP) is a method for implementing virtual private networks. PPTP uses a control channel over TCP and a GRE tunnel operating to encapsulate PPP packets.

The PPTP specification does not describe encryption or authentication features and relies on the PPP protocol being tunneled to implement security functionality. However the most common PPTP implementation, shipping with the Microsoft Windows product families, implements various levels of authentication and encryption natively as standard features of the Windows PPTP stack. The intended use of this protocol is to provide similar levels of security and remote access as typical VPN products.

General

This page allows you to configure the general VPN settings.

Name	Enter a name for your VPN policy
Connection Type	Supports IPSec and L2TP over IPSec methods to establish VPN connection.

PPTP

Authentication	Select the desired authentication protocol (PAP, CHAP, Auto). Select Auto by default.
Encryption	Supports 40-bit , 128-bit or No encryption.
User Name	Enter the username for authentication.
Password	Enter the password for authentication.

Network

Server IP	Enter the VPN Server IP address.
Remote IP Range	Assign a range of IP addresses. The assigned IP range should be on the same IP network but not the in the same range as your DHCP IP range.

L2TP

In computer networking, Layer 2 Tunneling Protocol (L2TP) is a tunneling protocol used to support virtual private networks (VPNs). It does not provide any encryption or confidentiality by itself; it relies on an encryption protocol that it passes within the tunnel to provide privacy.

General

This page allows you to configure the general VPN settings.

Name	Enter a name for your VPN policy
Connection Type	Supports IPSec and L2TP over IPSec methods to establish VPN connection.

L2TP

Authentication	Select the desired authentication protocol (PAP, CHAP, Auto). Select Auto by default.
User Name	Enter the username for authentication.
Password	Enter the password for authentication.

Network

Server IP	Enter the VPN Server IP address.
Remote IP Range	Assign a range of IP addresses. The assigned IP range should be on the same IP network but not the in the same range as your DHCP IP range.

IPSec

IPSec (Internet Protocol Security) is a protocol suite for securing Internet Protocol (IP) communications by authenticating and encrypting each IP packet of a communication session.

IPSec also includes protocols for establishing mutual authentication between agents at the beginning of the session and negotiation of cryptographic keys to be used during the session.

IPSec is an end-to-end security scheme operating in the Internet Layer of the Internet Protocol Suite. It can be used in protecting data flows between a pair of hosts (host-to-host), between a pair of security gateways (network-to-network), or between a security gateway and a host (network-to-host).

General

This page allows you to configure the general VPN settings.

Name	Enter a name for your VPN policy
Connection Type	Supports IPSec and L2TP over IPSec methods to establish VPN connection.
Authentication Type	Supports pre-shared key method for authentication.
Shared Key	Enter the Shared Key.
Confirm	Enter your Shared Key again for verification.
Local ID Type	Supports IP Address, Domain Name, Email Address methods for Local ID Type.
Local ID	Enter an ID to identify and authenticate the local VPN endpoint.
Peer ID Type	Supports IP Address, Domain Name, Email Address methods for Peer ID Type.
Peer ID	Enter an ID to identify and authenticate the remote VPN endpoint.

SA (Security Association)

A Security Association (SA) is the establishment of shared security attributes between two network entities to support secure communication.

An SA may include attributes such as:

cryptographic algorithm and mode; traffic encryption key; and parameters for the network data to be passed over the connection.

Establishment of an SA is described in RFC 2408, the Internet Security Association and Key Management Protocol.

This page allows you to configure SA.

IKE (Phase 1) Proposal

Exchange

Select Main Mode or Aggressive Mode for IKE Phase 1 negotiation.

- **Main Mode:** Select this option to configure the standard negotiation parameters for IKE Phase 1 of the VPN Tunnel. (Recommended Setting)
- **Aggressive Mode:** Select this option to configure IKE Phase 1 of the VPN Tunnel to carry out negotiation in a shorter amount of time. (Not Recommended - Less Secure)

DH Group

Select a DH Group from the drop-down menu (Group 1, Group2, Group5 and Group14). As the DH Group number increases, the higher the level of encryption implemented for IKE Phase 1.

Encryption

The WLR4002 supports DES, 3DES, AES128, AES192, AES256 encryption methods for traffic through the VPN.

Authentication

The WLR4002 supports SHA1, MD5 methods for authentication. Life Time Enter the number of seconds for the IKE Lifetime. The period of time to pass before establishing a new IKE security association (SA) with the remote endpoint. The default value is 28800.

IPSec (Phase 2) Proposal Protocol

Select ESP (Encapsulating Security Payload) or AH (Authentication Header) for traffic through the VPN.

- **AH (Authentication Header)** to provide connectionless integrity and data origin authentication for IP datagrams and to provide protection against replay attacks.
- **ESP (Encapsulating Security Payload)** to provide confidentiality, data origin authentication, connectionless integrity, an anti-replay service (a form of partial sequence integrity), and limited traffic flow confidentiality.

Encryption

The WLR4002 supports **DES, 3DES, AES128, AES192, AES256** encryption methods for traffic through the VPN.

Authentication

The WLR4002 supports **SHA1, MD5** methods for authentication.

Perfect Forward Secrecy

Select Enable or Disable to enable or disable PFS (Perfect Forward Secrecy). PFS is an additional security protocol.

DH Group

Select a PFS DH Group from the drop-down menu (**Group 1, Group2, Group5, Group14**). As the DH Group number increases, the higher the level of encryption implemented for PFS.

Life Time

Enter the number of seconds for the IPSec Lifetime. The period of time to pass before establishing a new IPSec security association (SA) with the remote endpoint. The default value is 28800.

Network

This page allows you to configure the VPN server and local/remote subnet.

Security Gateway Type	Security Gateway Type supports IP Address and Domain Name. Select one of them.
Security Gateway	The IP address or domain name of the VPN server.
Local Network	Enter the local (LAN) subnet and mask. (ex. 192.168.0.0/255.255.255.0)
Remote Network	Enter the remote subnet and mask. (ex. 192.168.9.0/255.255.255.0)

Advanced

This page allows you to configure advanced VPN settings.

Nat Traversal

Enabling **NAT Traversal** allow IPsec traffic from this endpoint to traverse through the translation process during NAT. The remote VPN endpoint must also support this feature and it must be enabled to function properly over the VPN.

Dead Peer Detection

Enable **DPD (Dead Peer Detection)** to delete the VPN tunnel if there is no traffic detected. The VPN will re-establish once traffic is again sent through the tunnel.

L2TP over IPSec

L2TP over IPSec VPNs enable a business to transport data over the Internet, while still maintaining a high level of security to protect data. You can use this type of secure connection for small or remote office clients that need access to the corporate network. You can also use L2TP over IPSec VPNs for routers at remote sites by using the local ISP and creating a demand-dial connection into corporate headquarters.

General

Name	Enter a name for your VPN policy
Connection Type	Supports IPSec and L2TP over IPSec methods to establish VPN connection.
Authentication Type	Supports pre-shared key method for authentication.
Shared Key	Enter the Shared Key.
Confirm	Enter your Shared Key again for verification.

L2TP/PPTP

Authentication	Select the desired authentication protocol (PAP, CHAP, Auto). Select Auto by default.
User Name	Enter the username for authentication.
Password	Enter the password for authentication.

Network

Server IP	Enter the VPN Server IP address.
Remote IP Range	Assign a range of IP addresses. The assigned IP range should be on the same IP network but not the in the same range as your DHCP IP range.

User Setting

This page allows you to maintain VPN users.

The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN (which is highlighted), and Toolbox. Below this, a sub-navigation bar shows Status, Wizard, Profile Setting, and User Setting (which is highlighted). The main content area has a heading "You can maintain VPN users in this page." followed by a form with three input fields: "Name :", "Password :", and "Confirm password :". Below these fields are "Add" and "Reset" buttons. Underneath the form is a section titled "Current VPN User Table" which contains a table with three columns: "NO.", "User Name", and "Select". Below the table are buttons for "Delete Selected", "Delete All", and "Reset". At the bottom right of the section are "Apply" and "Cancel" buttons.

wireless gigabit
VPN router N300

SITECOM

Choose your language ▼

Status Wizard Wireless Settings Firewall Advanced Settings **VPN** Toolbox

Status Wizard Profile Setting **User Setting**

You can maintain VPN users in this page.

Name :

Password :

Confirm password :

Add Reset

Current VPN User Table

NO.	User Name	Select
-----	-----------	--------

Delete Selected Delete All Reset

Apply Cancel

Add a user Enter the desired name and password, for verification the password has to be entered twice. Click 'Add' to add the user to the current VPN user table

Reset This button will clear all values from the input boxes.

Current VPN user table shows all existing VPN users.

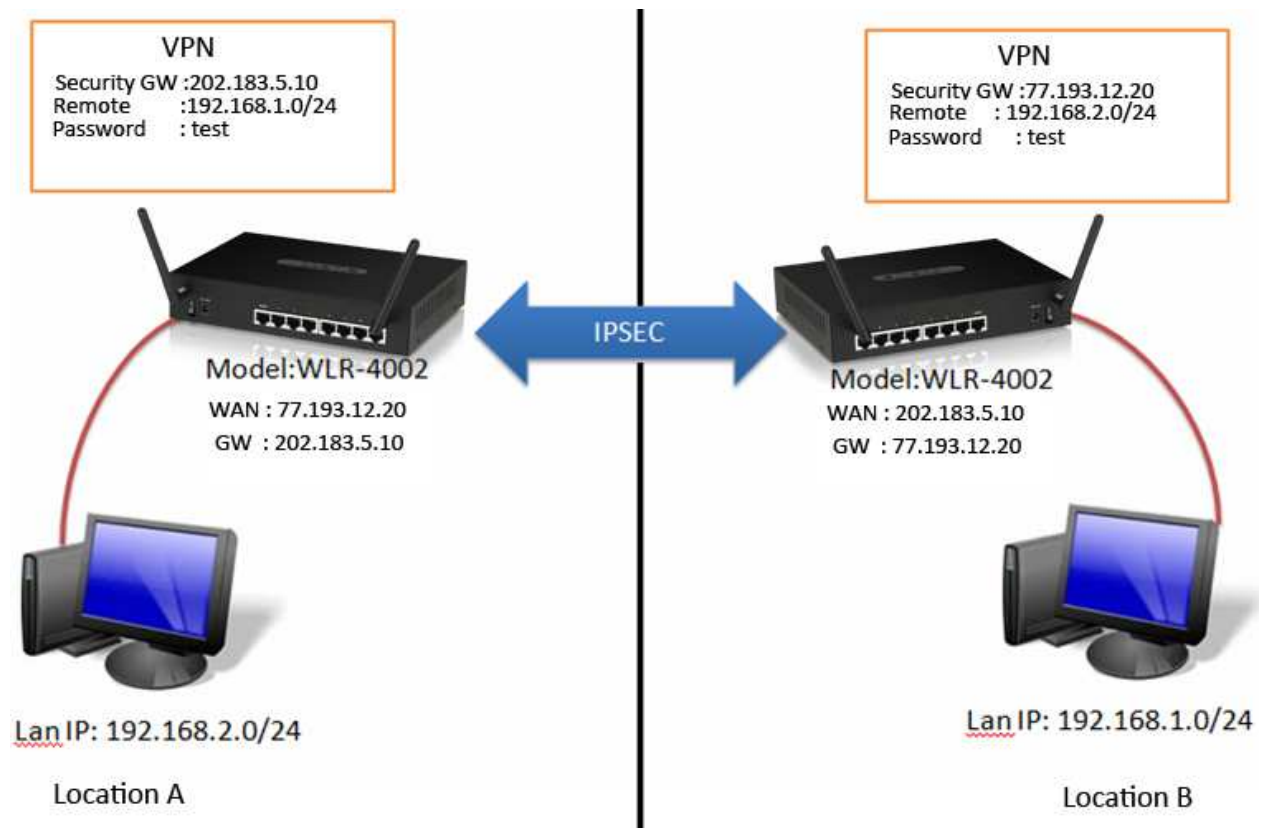
Delete Selected Select a user from the table and Click Delete Selected to delete this user.

Delete ALL This deletes all current VPN user from the current table.

Click "**Apply**" to save the settings and apply the changes.

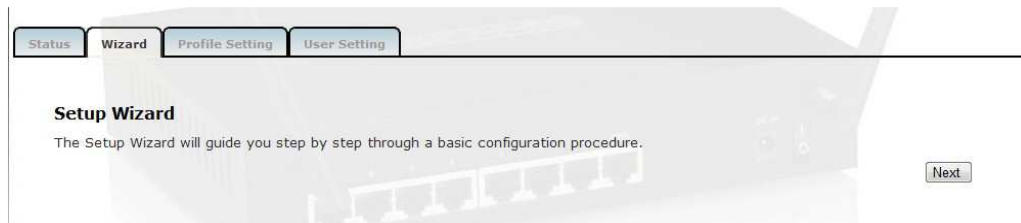
Example of configuring IPSec Site to Site architecture

In this guide we give an example how to set up a IPSec Site to Site architecture. The values in this example are only to give an impression of how to do the configuration.



Configuring Location B

1. Click on **VPN** in the top menu then click **Wizard** in the submenu. Click **Next** to continue.



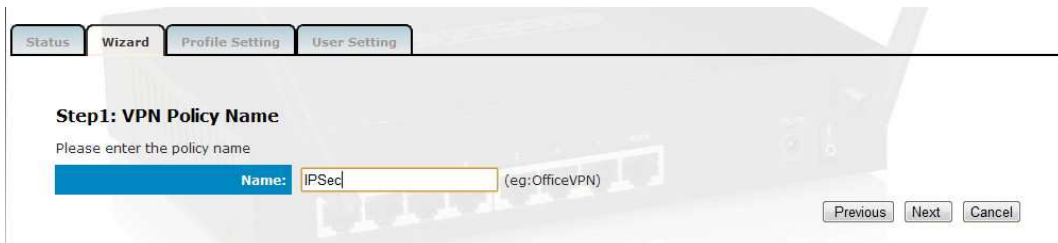
Status Wizard Profile Setting User Setting

Setup Wizard

The Setup Wizard will guide you step by step through a basic configuration procedure.

Next

2. In the **Name** field, enter a name for the IPSec VPN tunnel. This name is for reference purposes. Click **Next** to continue.



Status Wizard Profile Setting User Setting

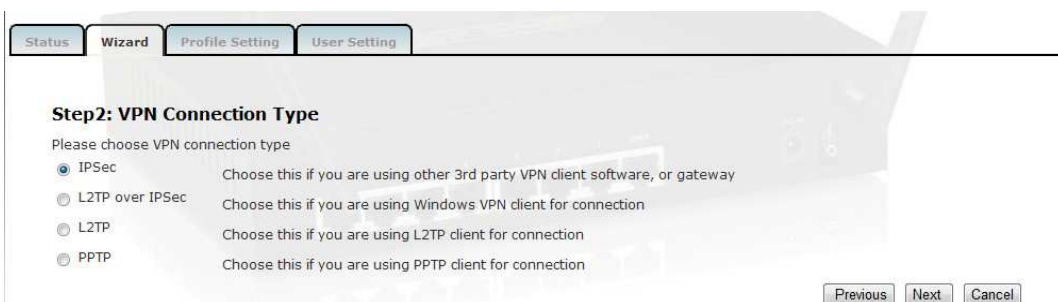
Step1: VPN Policy Name

Please enter the policy name

Name: (eg:OfficeVPN)

Previous Next Cancel

3. Click **IPSec** and click **NEXT** to continue.



Status Wizard Profile Setting User Setting

Step2: VPN Connection Type

Please choose VPN connection type

- ☒ IPSec Choose this if you are using other 3rd party VPN client software, or gateway
- ☐ L2TP over IPSec Choose this if you are using Windows VPN client for connection
- ☐ L2TP Choose this if you are using L2TP client for connection
- ☐ PPTP Choose this if you are using PPTP client for connection

Previous Next Cancel

4. Click **Site to Site** and click **NEXT** to continue.



Status Wizard Profile Setting User Setting

Step3: VPN IPSec Mode

Please choose the IPSec Mode

- ☐ Client to Site Choose this if you are setting up for Telwork or home to office connection.
- ☒ Site to Site Choose this if you are setting up a VPN connection between two dedicated VPN servers.

Previous Next Cancel

5. Complete the following fields :

- Security Gateway Type** Choose the type of **Security Gateway** you wish to use(In this example we use IP address).
- Security Gateway** Enter the **WAN IP address** of the **remote VPN Server**(In our example this is the WAN IP address of the WLR-4002B in Location A, 77.193.12.20)
- Remote Address** Enter an **IP address** that is on the same **Subnet** as the Local LAN of the remote VPN server (In our example the WLR-4002B in location A has a **local IP** of 192.168.2.1 so we set the **Remote address** to 192.168.2.0)
- Remote Netmask** Enter the Netmask of the Remote Local LAN(In our example the WLR-4002B in Location A has a **IP Subnet Mask** of 255.255.255.0)
- click **NEXT** to continue.

Status Wizard Profile Setting User Setting

Step4: VPN Network

Please enter the IPSec gateway or the destination network for this VPN tunnel

Security Gateway Type: IP address

Security Gateway: 77.193.12.20
(eg:69.100.100.100 or www.google.com.tw)

Remote Network

Remote Address: 192.168.2.0 (eg: 192.168.2.0)

Remote Netmask: 255.255.255.0 (eg: 255.255.255.0)

Previous Next Cancel

6. Enter the **Shared Key** you wish to use, this shared key must be used in both VPN servers.(In this example we used 'test')

Status Wizard Profile Setting User Setting

Step5: Shared Key

Please enter the shared key for the VPN

SA: ESP-3DES-SHA1

Shared Key: sharedkey
(eg:apple123)

Previous Next Cancel

7. **Enable the VPN policy**, and then click **Apply** to save the VPN profile.



8. Repeat these steps 1~7 for the other VPN server.
9. Once Both VPN routers have been completely set up. Click on **Status** in the submenu of the VPN menu and click **Connect** to establish the IPSec Site to Site connection.



16 TOOLBOX

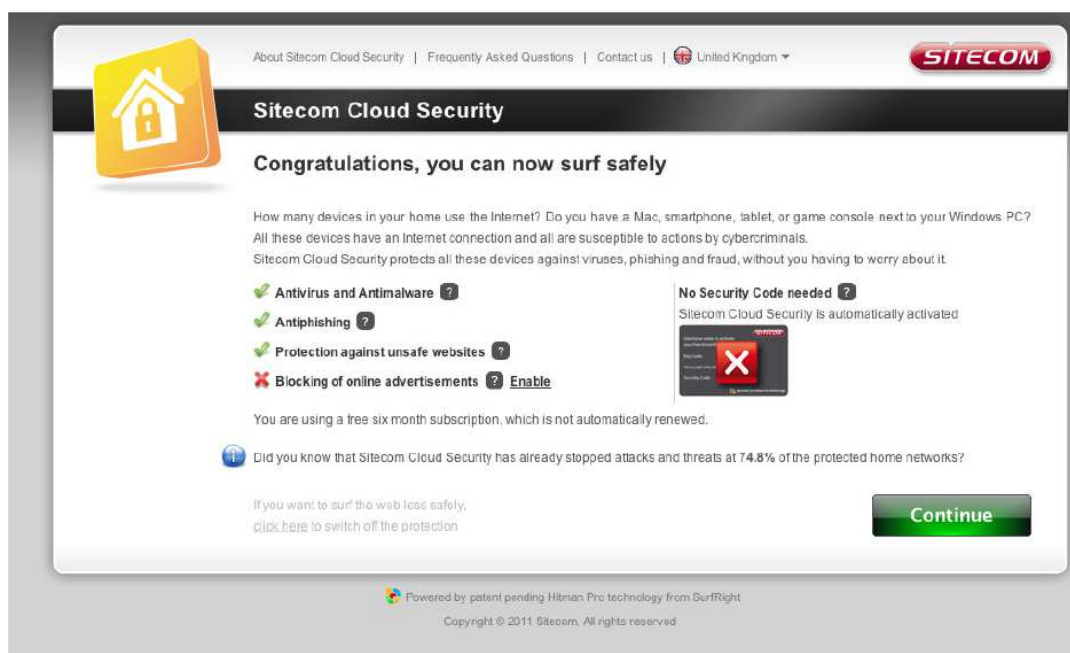
Sitecom Cloud Security

Antivirus software alone is not safe enough. You can now benefit from additional built-in security in your modem or router. Protect all devices in your home network against cybercrime while browsing. Activated automatically, your network and devices are better secured than ever before.

Your Sitecom device comes with a 6 month free *Sitecom cloud security* subscription.

After you have set up your Sitecom device for internet access, open the web browser and enter <http://www.sitecomcloudsecurity.com> in the address bar.

If the device has been properly configured the following web page should be shown.

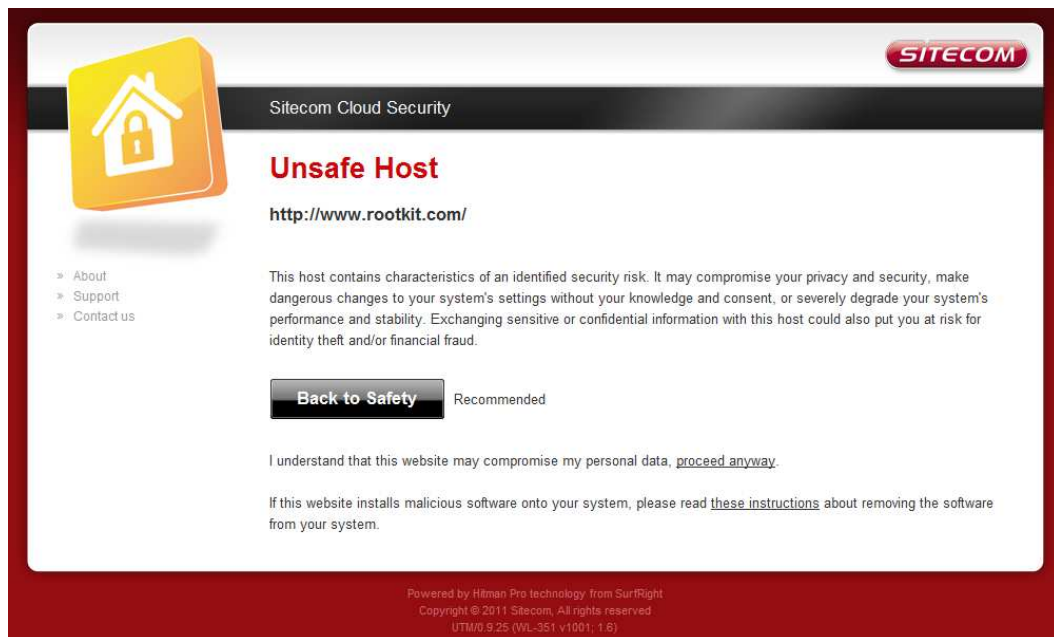


Here you can see which security features are activated.

The *Sitecom Cloud Security* service offers the following protection options:

- 1 Anti-Malware
- 2 Anti-Phishing
- 3 Protection against unsafe websites
- 4 Advertisement blocking

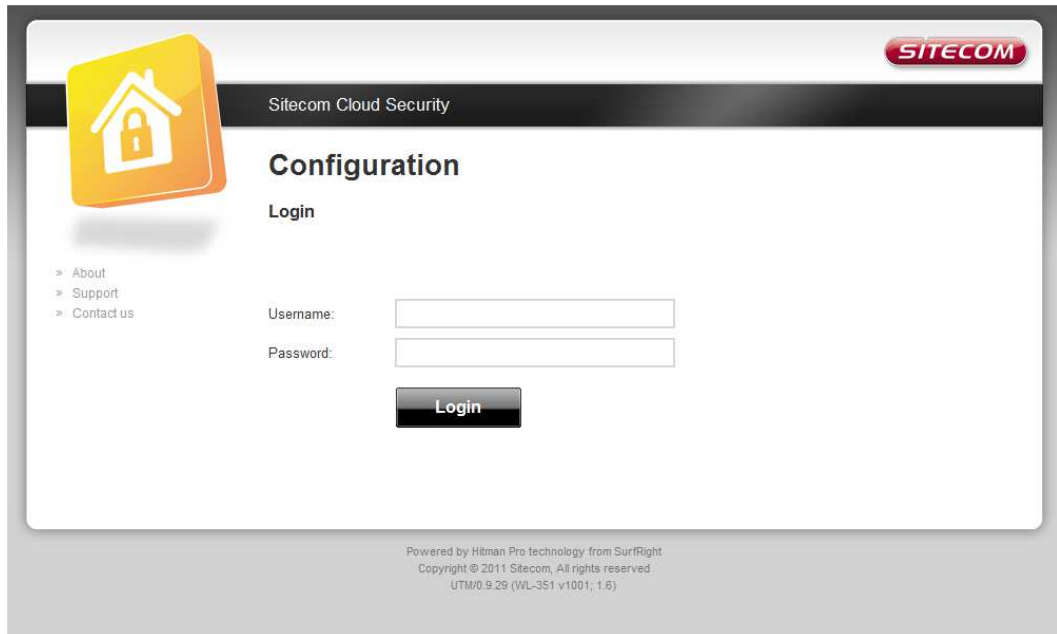
With the protection of *unsafe websites* activated the *Sitecom Cloud Security* will always check if a website is safe. If it is not safe it will inform you that is not safe to enter.



If you still wish to visit this webpage click on 'proceed anyway'. Alternatively click 'Back to Safety' so that your security will not be breached.

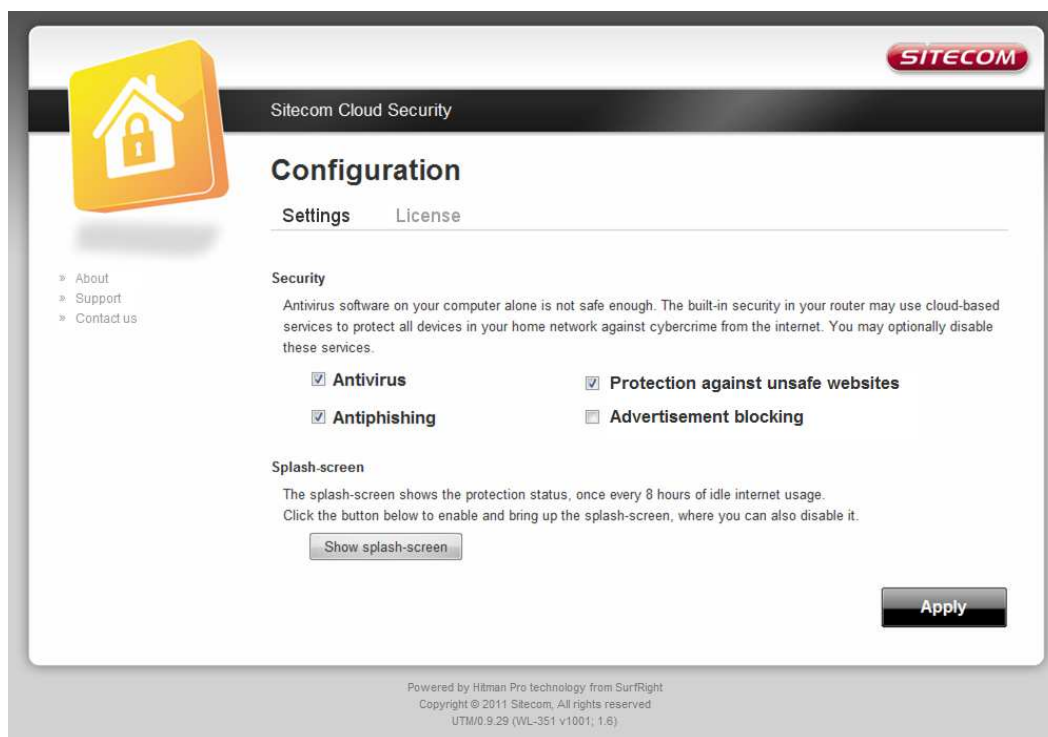
If you wish to change your security options or to extend your subscription at any time, open <http://www.sitecomcloudsecurity.com> from your web browser.

You will be asked for a username and password. These can be found on the backlabel on the bottom of your Sitecom router or modem.

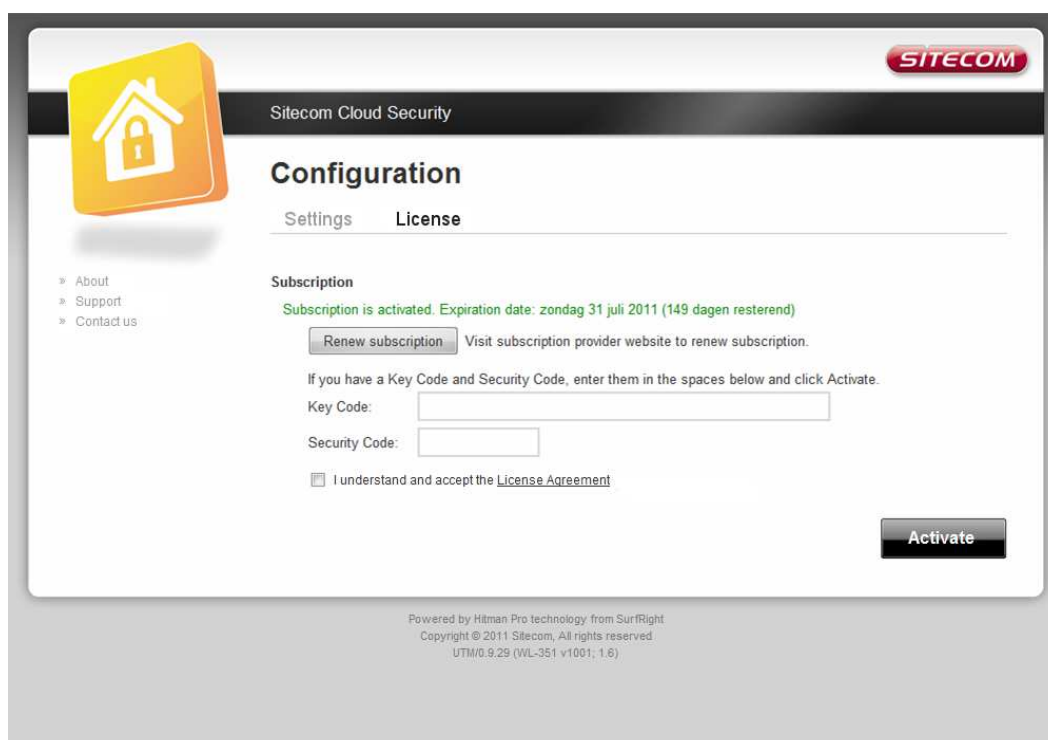


The screenshot displays the 'Sitecom Cloud Security' configuration interface. At the top left is a yellow house icon with a padlock. The top right features the 'SITECOM' logo. Below the header, the page is titled 'Configuration' and 'Login'. On the left side, there is a navigation menu with links: 'About', 'Support', and 'Contact us'. The main area contains a login form with two input fields: 'Username:' and 'Password:'. Below these fields is a black 'Login' button. At the bottom of the page, small text reads: 'Powered by Hitman Pro technology from SurfRight', 'Copyright © 2011 Sitecom, All rights reserved', and 'UTM/0 9.29 (WL-351 v1001; 1.6)'.

If the login succeeded you can click on 'Settings' to change your security options.



Or click 'License' to renew your subscription.



If you wish to disable Sitecom Cloud Security at any time, open the webpage of your Sitecom product and log in with the supplied credentials (these can be found on the back label on the bottom of your Sitecom device).

Go to Toolbox and select "Sitecom Cloud Security".



Click the "**Disable**" radio button and click 'Apply' for the settings to take effect.

Password change options

You can change the password required to log into the broadband router's system web-based management. Passwords can contain 0 to 12 alphanumeric characters, and are case sensitive.

The screenshot shows the web interface of a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a sub-menu contains Sitecom Cloud Security, Password, Timezone, Remote, Firmware, Back-up, Reset, and DDNS. The 'Password' tab is selected. The main content area displays a message: 'You can change the password which is required to log on to the router. By default, the password is admin. Passwords can contain 0 to 30 alphanumeric characters, and are case sensitive.' Below this message are three input fields labeled 'Current Password:', 'New Password:', and 'Confirm Password:'. At the bottom right of the form are 'Apply' and 'Cancel' buttons.

Current Password Fill in the current password to allow changing to a new password.

New Password Enter your new password.

Confirmed Password Enter your new password again for verification purposes.

Click <**Apply**> at the bottom of the screen to save the above configurations

Time Zone

The Time Zone allows your router to base its time on the settings configured here, which will affect functions such as Log entries and Firewall settings.

wireless gigabit
VPN router N300

SITECOM

Choose your language ▼

Status Wizard Wireless Settings Firewall Advanced Settings VPN Toolbox

Sitecom Cloud Security Password Timezone Remote Firmware Back-up Reset DDNS

Set the time zone of the Broadband router. This information is used for log entries and firewall settings.

Set Time Zone : (GMT+01:00)Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna ▼

Time Server Address : europe.pool.ntp.org

Daylight Saving : ☐ Enable From January ▼ 1 ▼ To January ▼ 1 ▼

Apply Cancel

Set Time Zone Select the time zone of the country you are currently in. The router will set its time based on your selection.

Time Server Address You can set an NTP server address.

Enable Daylight Savings The router can also take Daylight savings into account. If you wish to use this function, you must check/tick the enable box to enable your daylight saving configuration (below).

Start Daylight Savings Time Select the period in which you wish to start daylight Savings Time

End Daylight Savings Time Select the period in which you wish to end daylight Savings Time

Click <**Apply**> at the bottom of the screen to save the above configurations

Remote Management

The remote management function allows you to designate a host in the Internet the ability to configure the Broadband router from a remote site. Enter the designated host IP Address in the Host IP Address field.

The screenshot shows the configuration interface for a Sitecom N300 wireless gigabit VPN router. The top navigation bar includes tabs for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a secondary bar contains Sitecom Cloud Security, Password, Timezone, Remote, Firmware, Back-up, Reset, and DDNS. The 'Remote' tab is selected. The main content area has a title 'wireless gigabit VPN router N300' and a 'SITECOM' logo. A language selection dropdown is in the top right. A descriptive text states: 'The remote management function allows you to designate a host from the Internet to have management/configuration access to the router from a remote site. Enter the designated host IP Address in the Host IP Address field.' Below this is a table with three columns: 'Host Address', 'Port', and 'Enable'. The 'Host Address' column has an empty text input field. The 'Port' column has a text input field containing '8080'. The 'Enable' column has a radio button. At the bottom right of the table are 'Apply' and 'Cancel' buttons.

Host Address	Port	Enable
	8080	☐

Host Address This is the IP address of the host in the Internet that will have management/configuration access to the Broadband router from a remote site. If the Host Address is left 0.0.0.0 this means anyone can access the router's web-based configuration from a remote location, providing they know the password.

Port The port number of the remote management web interface.

Enabled Select "**Enabled**" to enable the remote management function.

Click <**Apply**> at the bottom of the screen to save the above configurations.

Firmware Upgrade

This page allows you to upgrade the router's firmware.

The screenshot shows the web interface of a Sitecom wireless gigabit VPN router N300. The top navigation bar includes links for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, VPN, and Toolbox. Below this, a secondary bar contains links for Sitecom Cloud Security, Password, Timezone, Remote, Firmware (which is the active page), Back-up, Reset, and DDNS. The main content area of the Firmware page contains the following text: "This tool allows you to upgrade the Routers firmware. Browse to and select the upgrade file and click APPLY. You will be prompted to confirm the upgrade." Below this text, there is a section for "Enable automatic firmware update" with two radio buttons: "Enable" (which is selected) and "Disable". Underneath the radio buttons is a text input field for the firmware file path, followed by a "Browse..." button. At the bottom right of the page, there are "Apply" and "Cancel" buttons.

Enable automatic firmware update When enabled the router will periodically check if a new firmware is available, if a new firmware is detected the router will give a notification.

Firmware Upgrade This tool allows you to upgrade the Broadband router's system firmware. To upgrade the firmware of your Broadband router, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also use the Browse button to find the firmware file on your PC.

Once you've selected the new firmware file, click **<Apply>** at the bottom of the screen to start the upgrade process

Backup Settings

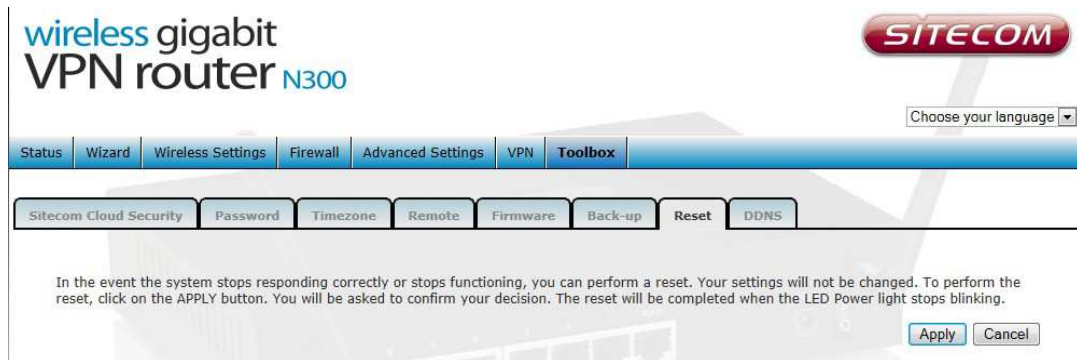
The Backup screen allows you to save (Backup) the router's current configuration settings. When you save the configuration setting (Backup) you can re-load the saved configuration into the router through the Restore selection. If extreme problems occur you can use the Restore to Factory Defaults selection, this will set all configurations to its original default settings (e.g. when you first purchased the router).



Use the "Backup" tool to save the Broadband router current configuration to a file named "**config.bin**" on your PC. You can then use the "Restore" tool to restore the saved configuration to the Broadband router. Alternatively, you can use the "Restore to Factory Defaults" tool to force the Broadband router to perform a power reset and restore the original factory settings.

Reset

You can reset the router's system should any problem exist. The reset function essentially re-boots your router's system.



DDNS

DDNS allows you to map the static domain name to a dynamic IP address. You must get an account, password and your static domain name from the DDNS service providers. This router supports DynDNS, TZO and other common DDNS service providers.

wireless gigabit
VPN router N300

SITECOM

Choose your language ▼

Status Wizard Wireless Settings Firewall Advanced Settings VPN **Toolbox**

Sitecom Cloud Security Password Timezone Remote Firmware Back-up Reset **DDNS**

DDNS allows users to map a static domain name to a dynamic IP address. You must get an account, password and your static domain name from the DDNS service provider..

Dynamic DNS : ☐ Enable ☒ Disable

Provider : 3322(qdns) ▼

Domain Name :

Account/E-mail :

Password/Key :

Apply Cancel

Enable/Disable

Enable or disable the DDNS function of this router

Provider

Select a DDNS service provider

Domain name

Fill in your static domain name that uses DDNS

Account/E-mail

The account that your DDNS service provider assigned to you.

Password/Key

The password you set for the DDNS service account above.

Click <**Apply**> at the bottom of the screen to save the above configurations.

Sitecom Europe BV

EC Declaration of Conformity

We
Sitecom Europe BV
Linatebaan 101
3045 AH Rotterdam
The Netherlands

Hereby declare under our sole responsibility that the Sitecom product:

Product number: WLR-4002B v1001
Product description: Wireless Gigabit VPN Router N300

To which this declaration relates is in conformity with the requirements of the following standards:

CE/LVD

· EN 60950-1: 2006+A11 (2009)

CE/EMC

· EN 301 489-1 V1.8.1
· EN 301 489-17 V2.1.1

RADIO SPECTRUM

· EN 300 328 V1.7.1 2006-10
· EN 50385 2002
· EN 301 893 V1.5.1.

This certifies that the following designated Sitecom product:

Product description: Wireless Gigabit VPN Router N300
Product No.: WLR-4002B v1001

Complies with the requirements of the following directives and carries the CE marking accordingly:
R&TTE Directive 99/5/EC, EMC directive 2004/95/EC and Low Voltage Directive 2006/95/EC.
This declaration is the responsibility of the manufacturer / importer:

Sitecom Europe B.V.
Rotterdam, X April 2012

P. Schoonenberg,



CEO




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CONFORMIDADE CE

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FOR USE IN:

NL	BE	LU	FR
ES	CH	PT	UK
DE	AT	SE	DK
IT	NO	SF	IE

Parts of the firmware of the WLR-4002B Wireless VPN Gigabit Router are subject to the [GNU general public license](#).

Appendix A: Licensing Information

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Specifically, the following part of this product is subject to the GNU GPL:

#	Package name	Source
1	Linux v2.6.21	www.kernel.org
2	busybox v1.7.5	http://www.busybox.net/
3	termcap v1.3.1	ftp://ftp.gnu.org/gnu/termcap
4	libupnp v1.6.0	http://pupnp.sourceforge.net/
5	pcre v6.x	http://www.pcre.org/
6	popt v1.7	http://freecode.com/projects/popt
7	dnsmasq v2.39	http://thekelleys.org.uk/dnsmasq/doc.html
8	iproute2 v2.6.16	http://www.linuxfoundation.org/en/Net:Iproute2
9	rp-pppoe v3.8	http://www.roaringpenguin.com/products/pppoe
10	iptables v1.3.8	http://www.netfilter.org/projects/iptables/index.html
11	wget-1.11.x	http://www.gnu.org/software/wget/
12	linuxigd v1.0	http://linux-igd.sourceforge.net/index.php
13	wireless_tools v28	http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html
14	updatedd-2.6	http://freecode.com/projects/updatedd
15	igmpproxy v0.1-beta2	http://sourceforge.net/projects/igmpproxy
16	pptp-client v1.7.1	http://pptpclient.sourceforge.net/
17	accel-pptp/pppd-plugin v0.8.3-rc5	http://accel-pptp.sourceforge.net/
18	ppp v2.4.3	http://ppp.samba.org/
19	udhcp v0.9.9-pre	http://sources.busybox.net/index.py/trunk/udhcp-web/index.html?revision=9967
20	ez-ipupdate v3.0.11b8	http://ez-ipupdate.com
21	uboot v1.1.4	http://www.denx.de/wiki/U-Boot
22	gcc v4.3.4	http://gcc.gnu.org/
23	uclibc v0.9.29	http://www.uclibc.org
24	zlib v1.2.3	http://www.zlib.net/
25	mtd-utils v1.2	http://git.infradead.org
26	openl2tp-1.x	http://www.openl2tp.org/
27	rpcbind-0.2.x	http://rpcbind.sourceforge.net/
28	ippool-1.3	http://sourceforge.net/projects/openl2tp/files/ippool/
29	openswan-2.6.2x	https://www.openswan.org/projects/openswan
30	gmp-4.3.x	http://gmplib.org/
31	libtirpc-0.2.x	http://sourceforge.net/projects/libtirpc/
32	libreadline v5.2	http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html

Availability of source code

Sitecom Europe BV has made available the full source code of the GPL licensed software, including any scripts to control the compilation and installation of the object code in the driver section of this product.

No Warranty

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